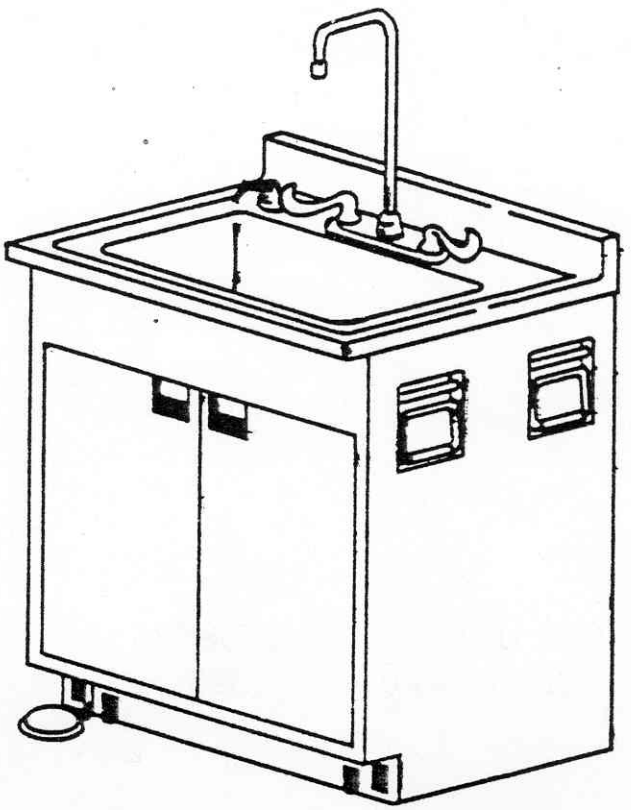
Hamilton Installation Operation and Maintenance Manual



Sink Unit No. 950S936

Sink Unit Number: 950S936
NSN: 6545-01-163-1899

Hamilton Industries, Inc.
1316 18th Street
Two Rivers, WI 54241
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Contents

	Page No.
Introduction	5
Nomenclature: System Familiarization/Features and Controls	6, 7, 8
Water Flow "Block" Diagram	9
Electrical Flow "Block" Diagram	10
Patient Safety and Other Precautions	11
Equipment Care	11
Installation and Operation Instructions	12, 13, 14
Electrical Supply Requirements	12
Installation	12, 13, 14
Water Drainage System and Preparation of Unit for Storage	14
Storage Requirements	15
Electrical Schematic - Sink Units:	
120/208V, 3 Phase, 60 Hz	16
120/240V, 1 Phase, 60 Hz	17
240V, 1 Phase, 50 Hz	18
Pictorial Wiring Diagram	19
Troubleshooting - Super Power Pack	20
Component Identification - Water Heater	21
Replacement Parts List - Water Heater	22
Service and Disassembly - Water Heater/Switches	23
Electrical Schematic - Water Heater Only	23
Temperature/Flow Chart	24
Wire Size Chart	25
Pump Maintenance/Troubleshooting	26
Service and Disassembly - Pump	27
Special Tool and Test Equipment	27
Parts List - Pump and Motor Assembly	28
Service and Adjustments - Pressure Tank & Pressure Switch	29
Parts List - Sink Unit - 30" Wide	30 - 31
Parts List - Switch, Heater, Pump Assembly	32 - 33
Design Change Notice	34
Consumable/Durable Item List	35

Contents

	Page No.
Short Form Provisioning Parts List	
Kit "A"	36
Kit "B1"	37
Kit "B2"	38, 39
Kit "C"	40. 41
Quality Assurance Inspection Checklist	42, 43
Receiver's Responsibility	44, 45
Appendix	46, 47, 48
Illustrations	
Nomenclature: System Familiarization/Features and Controls Illus. No. 1	8
Water Flow "Block" Diagram Illus. No. 2	9
Electrical Flow "Block" Diagram Illus. No. 3	10
Electrical Schematic - Sink Units:	
120/208V,3 Phase, 60 Hz Illus. No. 4	16
120/240V, 1 Phase, 60 Hz Illus. No. 5	17
240V, 1 Phase, 50 Hz Illus. No. 6	18
Pictorial Wiring Diagram Illus. No. 7	19
Component Identification - Water Heater Illus. No. 8	21
Replacement Parts List - Water Heater Illus. No. 9	22
Electric Schematic - Water heater Only Illus. No. 10	23
Parts List - Pump and Motor Assembly Illus. No. 11	28
Parts List - Sink Unit - 30" Wide Illus. No. 12	31
Parts List - Switch, Heater, Pump Assembly Illus. No. 13	32
Charts	
Troubleshooting - Super Power Pack - Chart No. 1	20
Temperature/Flow Chart No. 2	24
Wire Size Chart No. 3	25
Pump Maintenance/Troubleshooting - Chart No. 4	26

Introduction

Scrub sink unit for a field hospital consists of a cabinet with removeable casters, a stainless steel sink, soap dispenser, pump to supply water pressure, pressure tank to provide uniform flow rate and a water heater to provide adjustable water temperature. Unattached items furnished are mixing faucet with gooseneck for hot and cold water, hot and cold faucet handles, waste hose assembly, water supply hose and filler assembly, and electrical inlet cord. Additional items required but not supplied are external water supply, electrical supply and surgical soap.

Sink unit provides pressurized cold and heated water for use in field medical facilities. Provides sanitary waste facilities within the mdeical facility. Provides tempered water for cleansing of equipment and assistance in development of x-rays. The unit also provides surgical scrub facilities with necessary sterile controls, such as wrist control handles on water mixing faucet and foot operated soap dispenser.

The cabinet provides an overall unit size of 30-1/8" wide x 24" deep x 40" high, excluding the faucet gooseneck, which extends 20" above the sink top backsplash. Cabinet average weight is 260 pounds with a maximum of 265 pounds. Four carrying handles, two recessed in each side, and four support bars, one recessed above each handle are used to secure work counters 950S927 or 950S928 to the unit.

The actuator for the soap dispenser is foot operated; the dispensing nozzle is on the unit's top.

Water supply pump is powered by a 1/3 h.p. (minimum) 110/220V 50/60 Hz. motor, and pressurizes the pressure tank to a preset upper limit, approximately 60 psi maximum. When the tank pressure is reduced to a preset lower limit, approximately 30 psi minimum, the pump will automatically repressurize the tank. The upper and lower pressure limits are adjustable.

The water heater is an in-line heater which functions only when water is flowing through the heater. It is rated at 4 KW at 230V 50/60 Hz. and will operate at 208V, 50/60 Hz, with wattage reduced accordingly. Water temperature is adjustable using a rheostat in a solid state sircuit. Maximum water temperature is 150° F.

The water heater will operate on the following power supplies: 120/208V, 60 Hz, 1 Phase, 3 Wire; 240V, 50 Hz, 1 Phase, 2 Wire.

Recommended test equipment is as follows: Volt Ohm Meter, Continuity Tester and Immersible Thermometer (capable of measuring 150 degree F).

Shipping, Handling and Storage:

All furniture products have directional arrows which indicate how the product is to be loaded. Hamilton loading personnel are instructed to follow the directional arrows when loading truck loads, containers or assisting "LIL" common carriers. The exception to the directional arrows is allowed when "Topping" freight with lighter cartons for better utilization of the truckload space.

Heavier items are floor loaded with lighter items loaded on top. Heavy items can be double decked on the same product. Our loaders are instructed not to load heavy items on lighter weight items.

All truckloads must be secured at the rear and pictures are taken as a permanent record.

The above instructions should also apply to storage. Never place heavier items on lighter ones.

Recommended Storage Climate Limits Are:	Temperature:	0 Degree Fahrenheit — +130 Degree Fahrenheit
	Humidity:	5% Min. Humidity — 95% Max. Humidity

Warranty:

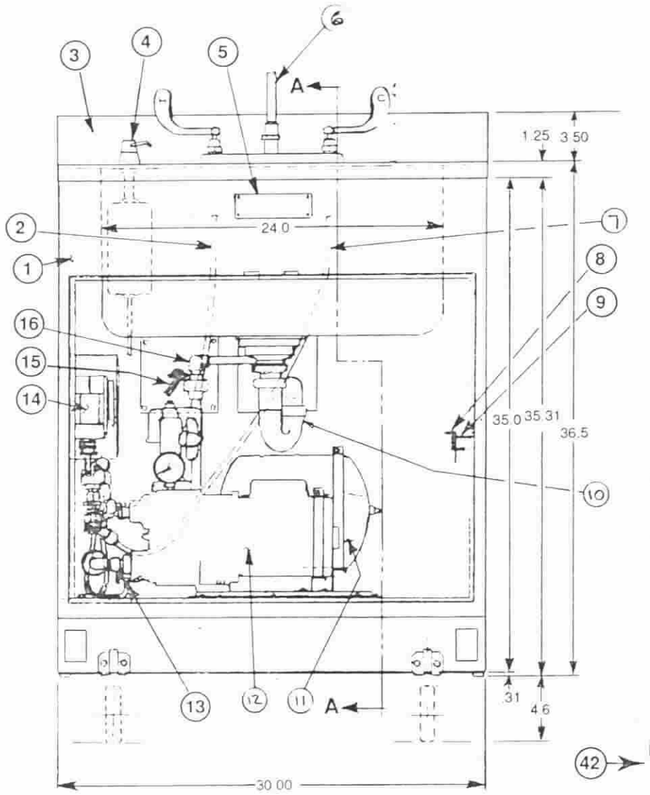
All product purchased on this contract are warranted to be free of defect in material and workmanship for a period of one (1) year from date of acceptance by the government. During the warranty period Hamilton Industries will repair or replace, at its expense, including transportation and labor, any part or product found to be defective. This warranty excludes any damage or malfunction due to accident, alteration, abuse, negligence, misuse, or repairs made by others.

Nomenclature: System Familiarization/Features and Controls

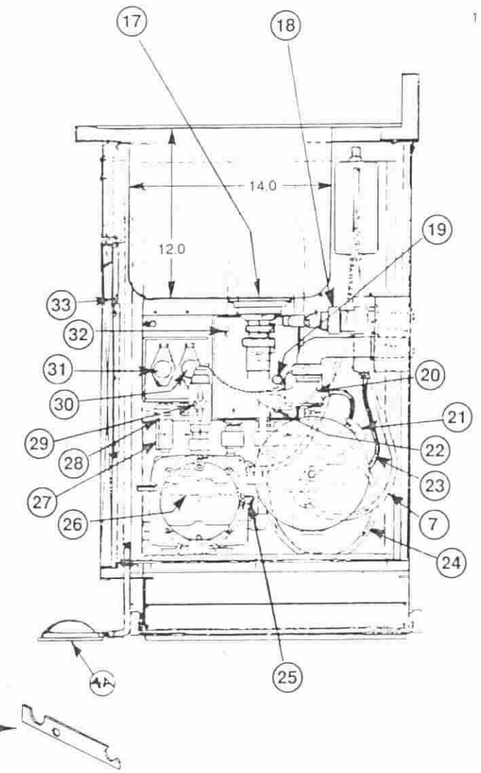
Item No.	Description	Function
1.	Cabinet body assembly with double hinged doors.	To house plumbing and electrical components and to support sink/top assembly.
2.	3/8" O.D. plastic tubing "riser", hot water.	To provide hot water from water heater to faucet.
3.	Stainless steel sink/top assembly.	To create a receptacle to collect water for the cleaning of hands and/or various washable items.
4.	Soap dispenser, foot operated.	To contain and dispense liquid soap for cleansing hands.
4A	Soap dispenser, foot pump.	Provides pressure to soap dispenser, when stepped on.
5.	Warning label, flammable or explosive atmosphere.	Advises operator's caution; to prevent fire or explosion.
6.	Hot and cold water mixing faucet with gooseneck, 6" wrist control handles and aerator.	To provide controlled flow of hot, cold or mixed temperature water to sink.
7.	3/8" O.D. plastic tubing "riser", cold water.	To provide cold water to faucet.
8.	"Allen" hex wrench from soap dispenser.	Used to remove and re-install soap dispenser "head" when filling with soap.
9.	Bracket, caster storage.	Provides for storage of casters when they are not utilized for moving cabinet.
10.	1-1/2" O.D. plastic tubing waste water trap and sink outlet "basket".	To collect waste water from sink and direct to outside of cabinet.
11.	Water tank, captive air.	Provides small reservoir of water at a fixed pressure.
12.	Shallow well pump and motor assembly.	Provides the means by which water is moved from the source to the faucet.
13.	Petcock with vinyl tubing on outlet.	Provides a means of draining pump assembly of water prior to storing unit in freezing climate.
14.	Plate, switch functions information.	Identifies and describes the functions of the motor control switches.
15.	Electric wire assembly to power source.	Provides electric power from outside source to water heater.
16.	Plastic tubing assembly, cemented together and with two unions.	Provides cold water from outside source to pump inlet.
17.	Combination strainer and stopper in drain opening, removeable.	To prevent large objects from going down the drain or to "plug" opening for filling sink.
18.	Valve, one-way check.	Prevents back flow of incoming water when pump is not running.
19.	Indicator light, water heater.	When light is illuminated, this indicates heater is functioning (is "on").
20.	Pressure operated switch, pump system.	Controls running of pump motor relative to increase or drop in system pressure within certain limits.

Item No.	Description	Function
21.	Valve, cold water flow control.	Controls cold water flow to water heater (alternate "temperature rise" control).
22.	Rheostat, heater temperature control.	Provides adjustment to control heater output temperature.
23.	Cord set, 3-wire electric.	To provide electric power to pressure switch from outside source.
24.	3/8" O.D. plastic tubing.	To provide cold water from flow control valve to water heater.
25.	Cord set, 6-wire electric.	Provides for remote switching of motor windings to match power source.
26.	Plastic valve with 3/8" O.D. plastic outlet tube.	Provides means of draining hot water system of water prior to storing unit in freezing climate.
27.	Pressure gauge, 0 to 100 lbs.	Indicates water system pressure.
28.	Cord set, 3-wire electric.	Provides electric power from pressure switch to pump motor on/off switch.
29.	Plastic valve, 3/4" ball type.	Provides convenient means for priming pump with water.
30.	Switch, DPST on/on electrical.	Provides means of matching pump motor windings to outside electrical source.
31.	Switch, DPST on/off electrical.	Provides on/off control of pump motor only.
32.	Water heater, flow-thru instantaneous.	Provides heated water to mixing faucet.
33.	Manual, in pocket on door.	Provides installation/operating instructions, parts lists, etc.
34.	Skid (2) plastic.	Allows ease in sliding unit on floor and isolates cabinet bottom from floor.
35.	Caster, swivel (4) with 4" diameter wheel.	Provides ease of movement when high mobility is required.
36.	Socket, caster.	Locates and retains caster. (Casters are removeable).
37.	Handle, drop type lift (90° upswing).	Provides means by which cabinet can be lifted and carried.
38.	Bar, fixed support.	To be used for hanging desk shelf or shelf hanging brack ets. (950S927, 950S928 or 950S929)
39.	Label, electrical supply requirements.	Lists the electric power source systems that may be connected to the cabinet.
40.	Fitting, quick-connect water inlet.	Provides convenient method for connecting water supply source to cabinet.
41.	Electric inlet, 4-wire twist-lock grounding.	Provides convenient method for connecting electric supply source to cabinet.
42.	Wrench, water heater, internal hex fittings.	Use to prevent rotation of tank connected inlet & outlet water tubes when servicing external connections.
	Accessories: Umbilical (Not Illustrated)	
47.	Cord set, 4-wire with plug and twist-lock connector. See Page 21.	Use to provide electric power from source to cabinet.
48.	Hose, waste outlet. See Page 21.	Connects cabinet waste outlet to external waste dispersal facility.
49.	Hose and filter assembly, quick-connect water supply. See Page 21.	Use to connect outside water source to cabinet piping.

Illus. No. 1
System Familiarization/Features and Controls Illustration



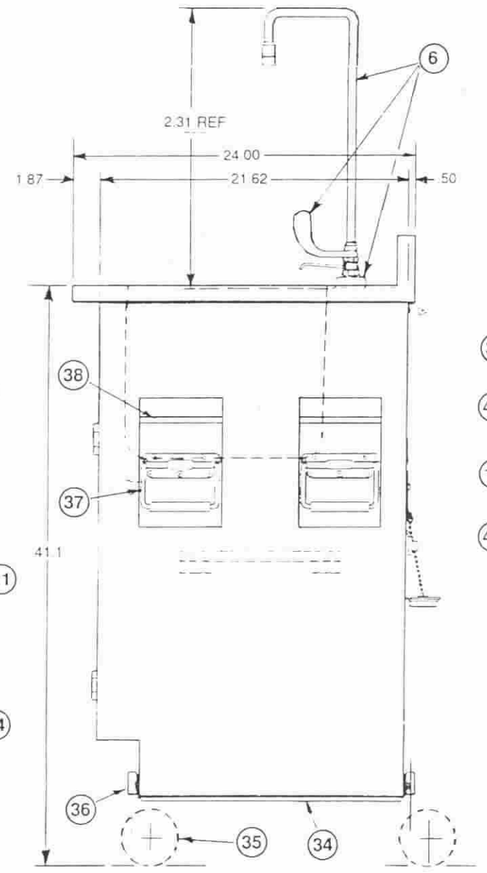
FRONT VIEW
(Doors Not Shown)



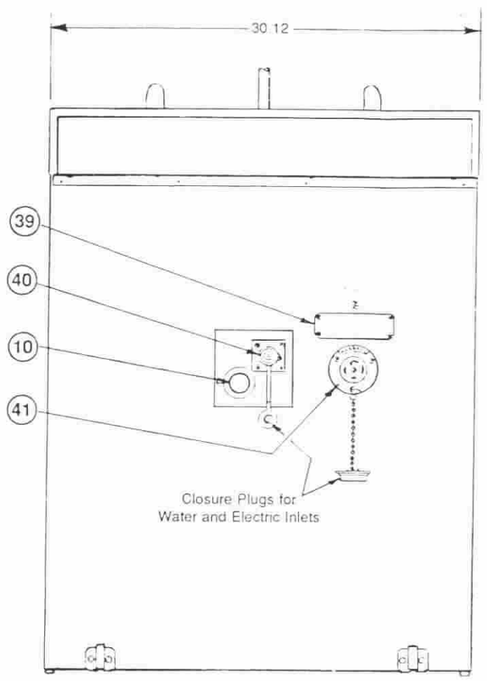
SECTION A-A

NOTE: Routing of Electrical Wiring is not shown on this drawing in order to avoid more confusion.

Electrical Wiring Schematics:
120/208 V 3 PH 60 Hz - See page 7.
120/230 V 1 PH 60 Hz - See page 8.
240 V 1 PH 50 Hz - See page 9.
Pictorial Wiring Diagram with Instructions:
See page 10.

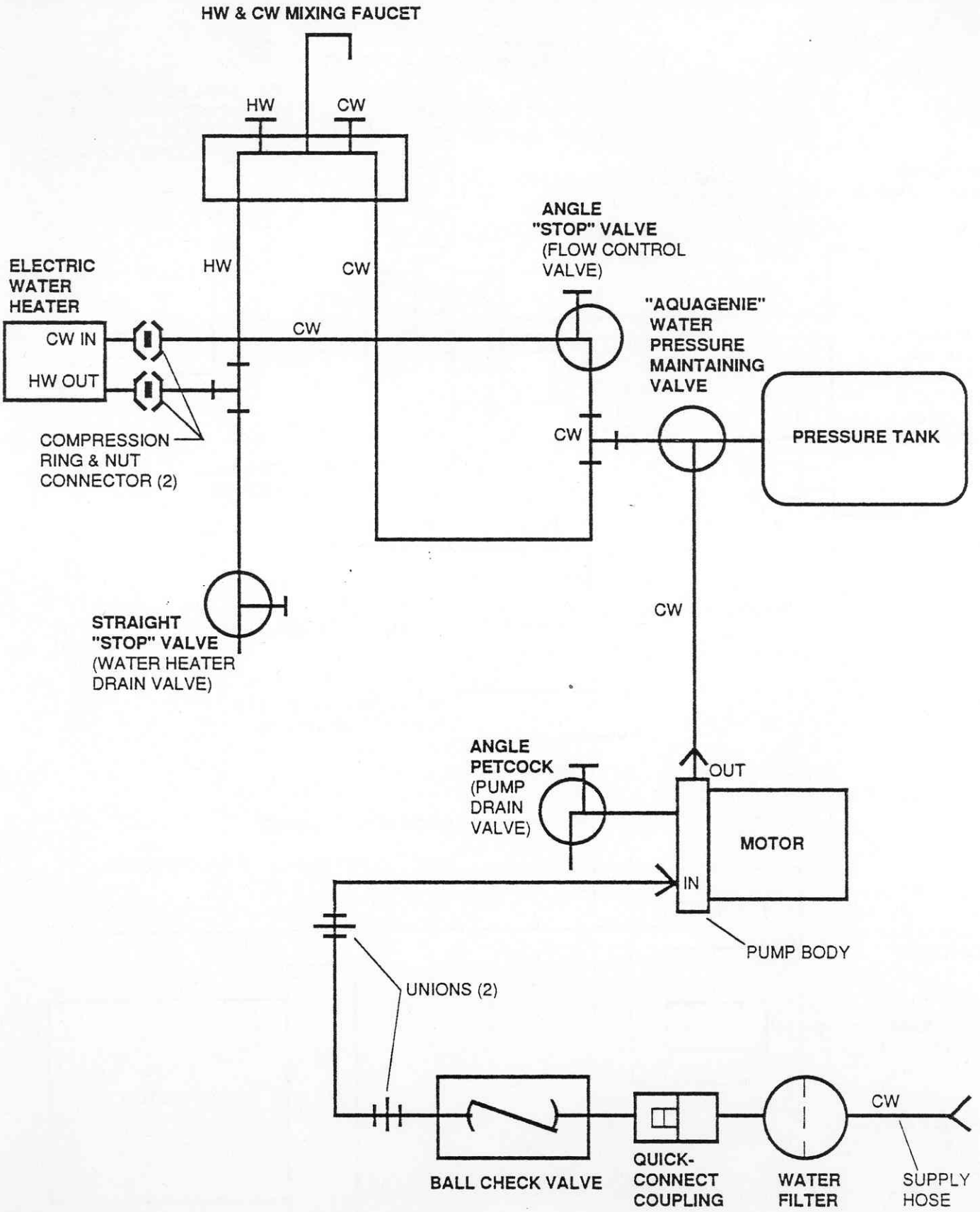


END VIEW

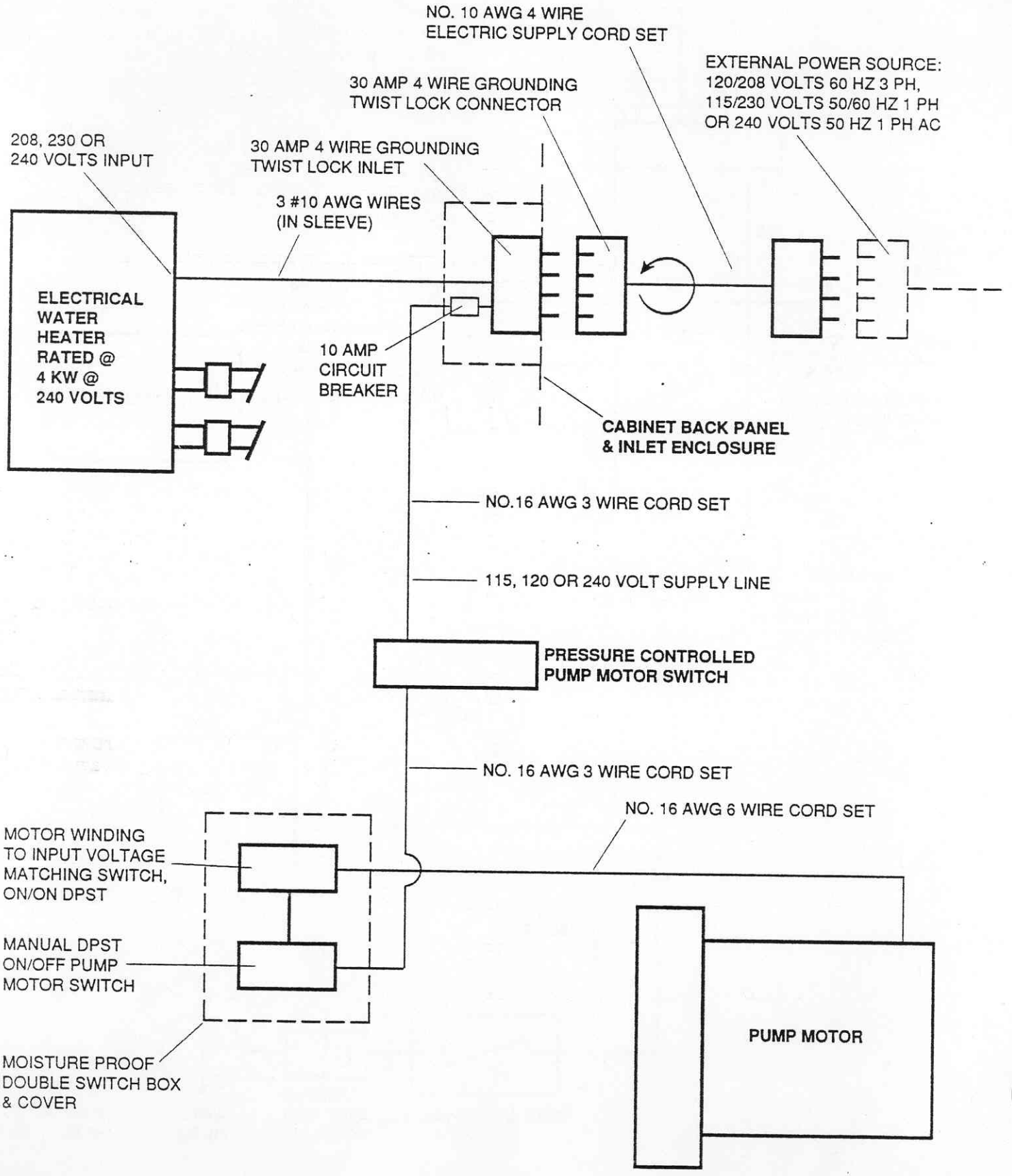


REAR VIEW

Illus. No. 2
Water Flow "Block" Diagram



Illus. No. 3
Electrical Flow "Block" Diagram



Patient Safety and Other Precautions

1. Wiring within cabinet is designed to use an independent ground lead which is not directly connected to any of the current carrying wires. The extension cord and connectors are rated at 30 Amps. A 30 Amp circuit breaker or fuse is required at the control panel.

   NOTE: During installation of unit, the circuit breaker (power) should be "off" at this time. To prevent pump motor burnout, prepare pump motor for running on either one of the three electric supply systems as noted in the installation manual.

2. When priming water system, check for water supply hookup. Do not run pump without water. Follow priming procedures in manual. The pump requires only water for lubrication and must not be run dry. If it is necessary to re-prime pump, repeat procedure until a continuous flow of water comes out of faucet.

3. Set temperature for hot water as per instructions in manual. Make sure circuit breaker is "on" and electrical supply cord is plugged into cabinet outlet. Make sure faucet hot water valve is fully open.

   NOTE: If temperature is too great, either increase the flow rate or rotate rheostat counterclockwise to desired temperature.

4. Should a pressurized water supply of 40 to 60 P.S.I. be available, this unit may be connected directly to this water supply by means of water supply hose. This will preclude the necessity of having the pump motor run. The motor control switch must be "off".

5. Before servicing water heater, be sure electric power is disconnected or turned off at entrance box, water system pressure is relieved and water system is drained. When disconnecting water lines from heater, do not lose union gaskets. If a replacement heater assembly is installed, it may be necessary to use union fittings from the old heater.

6. When servicing pressure tank, take notice that a new tank, in case of replacement, is normally pre-charged to 20 P.S.I. by tank manufacturer.

   When servicing pressure switch, do not touch wire terminals of current carrying components of switch, as these parts are "live" unless twist-lock connector at back of cabinet has been disconnected.

7. Pump must be drained to prevent freeze damage in cold climate areas, when not in use. If an alternate to draining is desired by use of antifreeze, use a non-toxic type antifreeze as per instruction in the manual.

Equipment Care

1. Wipe down cabinet exterior with mild type disenfectant soap.

2. Scour stainless steel counter top and sink assembly with mild type disinfectant bathroom cleaners.

Installation and Operation

Electric Supply Requirements:

208 Volt, 60 Hz, 3 Phase, "Y", with both 120 Volt and 208 Volt Outputs; this shall be 4 wire plus independent (equipment) ground wire.

230 Volt, 50/60 Hz. 1 Phase, with both 120 Volt and 230 Volt Outputs; this shall be 3 wire plus independent (equipment) ground wire.

240 Volt, 50 Hz. 1 Phase output; this shall be 2 wire plus an independant (equipment) ground wire.

Note: The wiring, within the cabinet, is designed to use an independent (equipment) ground lead which is not directly connected to any of the current carrying wires.

The extension cord and connectors are rated at 30 Amps. A 30 Amp. circuit breaker or fuse is required at the control panel.

Installation

1. Remove hardware and umbilical accessories from respective cartons.
2. External connections to unit: **Note:** * indicates items from carton assemblies.

   *A. Faucet Handles
   Install handle "H" on L.H. faucet stem and handle "C" on R.H. stem in the desired positions. Secure with flat head screws found in top of valve stems.

   *B. Gooseneck
   Moisten "O" ring on base of gooseneck with water and insert into opening in faucet body. Turn base down, clockwise, until tight. Gooseneck can be swiveled by hand.

   *C. Basket Strainer
   "Drop" in sink outlet opening.

   *D. Filter/Hose Assembly
   Engage male connector in female connector located in back panel of cabinet. Route hose to nearby potable water supply. Connect, or submerge, free end of hose at water supply.

   *E. Drain Hose Assembly
   Slide one end of corrugated hose on trap outlet located in back panel of cabinet. Route free end of hose to suitable waste receptacle or area.

   *F. Electric Supply Extension Cord Set

   Important!!! Circuit Breaker (Power) should be **"OFF"** at this time.

   Engage female connector of electric supply cord into male electrical inlet located in back panel of cabinet and twist clockwise to lock in place. Insert plug on free end of cord into a matching receptacle connected to the available power source.

   Should plug and receptacle be incompatible, then, the existing plug shall be removed and a suitable plug installed or the supply cord can be connected directly to a convenient power control panel.

   Connections below apply to NEMA 14-30P style plug. Other styles shall be wired in accordance with electric schematics on page 7, 8 or 9.

   Connections to combination 120 and 208 Volt Supply:

   "GR", "Round", blade (green wire) to independent (equipment) ground; The "Y", adjacent straight brass, blade (black wire) to a 208 Volt supply line; The "W", silver angle, blade (white wire) to the "Common" supply line; and the "X", parallel straight brass, blade (red wire) to a 208 Volt supply line, i.e.: Voltage across "W" and "Y" = 120 Volts and voltage across "X" & "Y" = 208 Volts.

   Connections to domestic combination 120 and 240 Volts supply:

   "GR", round, blade (green wire) to independent (equipment) ground; The "Y", adjacent straight brass, blade (black wire) to one side of 220-240 Volt supply line; The "W", silver angle, blade (white wire) to the "common" supply line; and the "X" parallel opposite side of 220-240 Volt supply line, i.e.: 120 Volts across "W" and "Y", and 220-240 Volts across "X" and "Y".

   Connections to foreign 2 wire 240 Volts supply:

   "GR", round, blade (green wire) to independent (equipment) ground; the "Y", adjacent straight brass, blade (black wire) to "Hot" side of 240 Volt supply line and the "W", silver angle, blade (white wire) along with the "X", parallel straight brass, blade (red wire) to "common" side of 240 Volt supply line, i.e.: Voltage across **"W" and "Y" and "X" and "Y"** = 230-250 Volts.

*G. Casters, if needed
Insert stems of casters in socket plates attached to bottom of cabinet, two at the front and two at the rear. Casters can be removed without tools and can be stored inside cabinet in rack provided when not in use.

3. Important!!! To Prevent Pump Motor Burn-out.
Prepare pump motor for running on either one of the three electric supply systems as noted below.

A. Open door (doors) of cabinet and find switch box located at inside front of L.H. end.

B. Take notice of "switch function" plate on "front" side of switch box.

C. Lift cover on front (L.H.) "motor control" switch and snap toggle down to **"Off"** (if not already **"Off").**

D. Lift cover on rear (R.H.) "motor winding" switch and snap toggle either up or down toward "line voltage" listing on the "switch function" plate that matches the external power source characteristics, i.e.; toggle "up" (115V. motor winding) **For 120/208 V.** or **115/230 V.** input "line voltage" and toggle **"Down"** (230 V. motor winding) **For 230-250 V.** 2 wire input "line voltage".

E. Close cover and do not disturb this switch unless in put "line voltage" is changed.

F. Use "motor control" switch for turning pump motor **"On"** or **"Off"** when necessary.

4. Priming of Water System. **Important: Do not run pump without water.**

Note: All of the above external connections and assembly must be made before priming.

A. Open door (doors) of cabinet and turn motor control switch **"Off".**

B. Close drain valve on water heater, petcock on pump body and flow control valve at pressure tank outlet.

C. Open **"COLD"** water valve of deck mounted faucet to relieve any pressure that may be in the system and leave open.

D. Open ball valve, located vertically on pump body, and pour 1 quart of water through valve into pump body.

E. Close ball priming valve.

F. Be sure water supply hose is routed to a good supply of potable water.

G. Turn **"On"** circuit breaker and "motor control" switch and let pump run until a continuous flow of water comes out of the faucet.

H. Close cold water faucet valve. Pump should now run until pressure is built-up enough to shut itself **"Off".**

Note: If it is necessary to re-prime pump, repeat operations "A" through "G" above until a continuous flow of water comes out of faucet.

J. Turn circuit breaker **"Off"** or disconnect power cord from cabinet.

K. Open faucet **"HOT"** water valve.

L. **Open Flow Control Valve,** on pressure tank outlet, enough to allow water to flow through the water heater. When a steady flow of water comes out of the faucet spout, close faucet **"HOT"** water valve.

Note: Leave Flow Control Valve "OPEN".

M. Turn circuit breaker "On" or reconnect power cord to cabinet electric inlet.

Do Not Run Pump Dry.

5. Hot Water Temperature Adjustment

Water temperature can be controlled by a Rheostat in the water heater housing, varying the rate of water flowing through the heater, or both. A minimum flow rate of approximately 1/2 gallon of water per minute through the heater is required to make the heater function. It is desirable to adjust the water heater for optimum performance when setting up the sink unit.

A. Check and be sure circuit breaker is **"On"** and electric supply cord is plugged into cabinet inlet. Pump switch should be **"On"** and water pressure built-up to approximately 60 P.S.I. on gauge (Approximately 45 P.S.I. @ 50 Hz.).

B. Insert tip of small flat blade screwdriver carefully into hole in water heater cover and engage blade in slot in Rheostat shaft; turn clockwise to the limit of the Rheostat.

C. Open faucet **"HOT"** water valve fully.

D. Close flow control valve on pressure tank outlet and then slowly open valve until light appears in the "window" in the face of the water heater cover. This is now the lowest rate of water flow needed to operate the heater, and this will give you the maximum water temperature rise.

E. To adjust the heater for optimum performance, insert screwdriver in Rheostat slot and rotate counterclockwise until light in heater just starts to "pulse". The temperature should now stabilize at this setting.

Note: Should the temperature of the **"HOT"** water be too great. either increase the flow rate by means of the flow control valve, or rotate Rheostat counterclockwise until desired water temperature is reached.

Conversely, the temperature can be increased, within limits, by reversal of the above operations. Remember though, a water flow rate of approximately 1/2 gallon per minute must be maintained if heater is to function.

F. Shut off faucet **"HOT"** water valve. Unit is now operational.

6. Soap Dispenser, Filling and Connecting Foot Control.

A. Feed clear plastic tubing from soap dispenser located inside cabinet through rubber grommet in front left hand edge of cabinet bottom.

B. Attach loose end of clear plastic soap dispenser tubing to *rubber "foot pump" from carton assembly.

C. To fill soap dispenser. engage *"Allen" socket wrench from carton assembly into socket head screw, located in dispenser "head" and loosen screw enough to allow head to be lifted off of dispenser body. Fill with soap through top opening and reinstall dispenser head.

7. Draining Water System. For Storage in Freezing Climates.

A. Slip one end of one *18 inch long clear plastic tubing over tube projecting out of brass petcock on pump body. Apply second length of clear plastic tubing to drainage valve located on the water heater outlet piping in the same manner as above.

A1. Disengage filter/hose assembly from female connector in back panel of cabinet and empty water out of filter and hose.

B. Route clear plastic tubes to suitable waste container of at least 1 gallon capacity.

C. Shut "motor control" switch **"Off"** and disconnect electric supply extension cord (or turn circuit breaker **"Off"**).

D. **Open** faucet **Cold Water Valve** to discharge the water and pressure in the water system.

E. **Leave faucet Cold Water Valve "OPEN".**

F. After the pressure has dropped to zero on the gauge, open petcock on pump and valve on water heater outlet and drain remainder of water out of system and pump.

G. **Close Petcock** on pump and faucet **COLD** water valve.

H. **Open** faucet **HOT** water valve which now allows water in faucet hot water riser to drain out through heater drain valve.

I. Close faucet hot water and heater drain valves.

J. Water system should now be drained of water and can now be prepared for storage or, shipping.

Note: To prepare unit for storage. Purge the system with non-toxic antifreeze through the water supply hose, pump, and the hot and cold water faucet valves. After clear water has been replaced by antifreeze, de-pressurize system, close faucet valves, and disconnect water supply hose at cabinet back. This will "seal" the antifreeze in the system. **With the system filled with antifreeze, the unit can now be set-up for use at any time without priming.** (Operation No. 3).

8. Preparing Unit For Storage or Shipping.

Reverse of Operation No. 2. Steps "A" through "G".

General Note:

Should a pressurized water supply of 40 to 60 P.S.I. be available, this unit may be connected directly to this water supply by means of the water supply hose. This will preclude the necessity of having the pump motor run. **The Motor Control Switch must be "OFF".** This will save approximately 8 Amps. in current consumption and the system will still operate.

Storage Requirements

Recommended Storage Climate Limits

Temperature Limits: **0 Degree Fahrenheit — +130 Degree Fahrenheit**

Humidity Limits: **Minimum Humidity-5%**
Maximum Humidity-95%

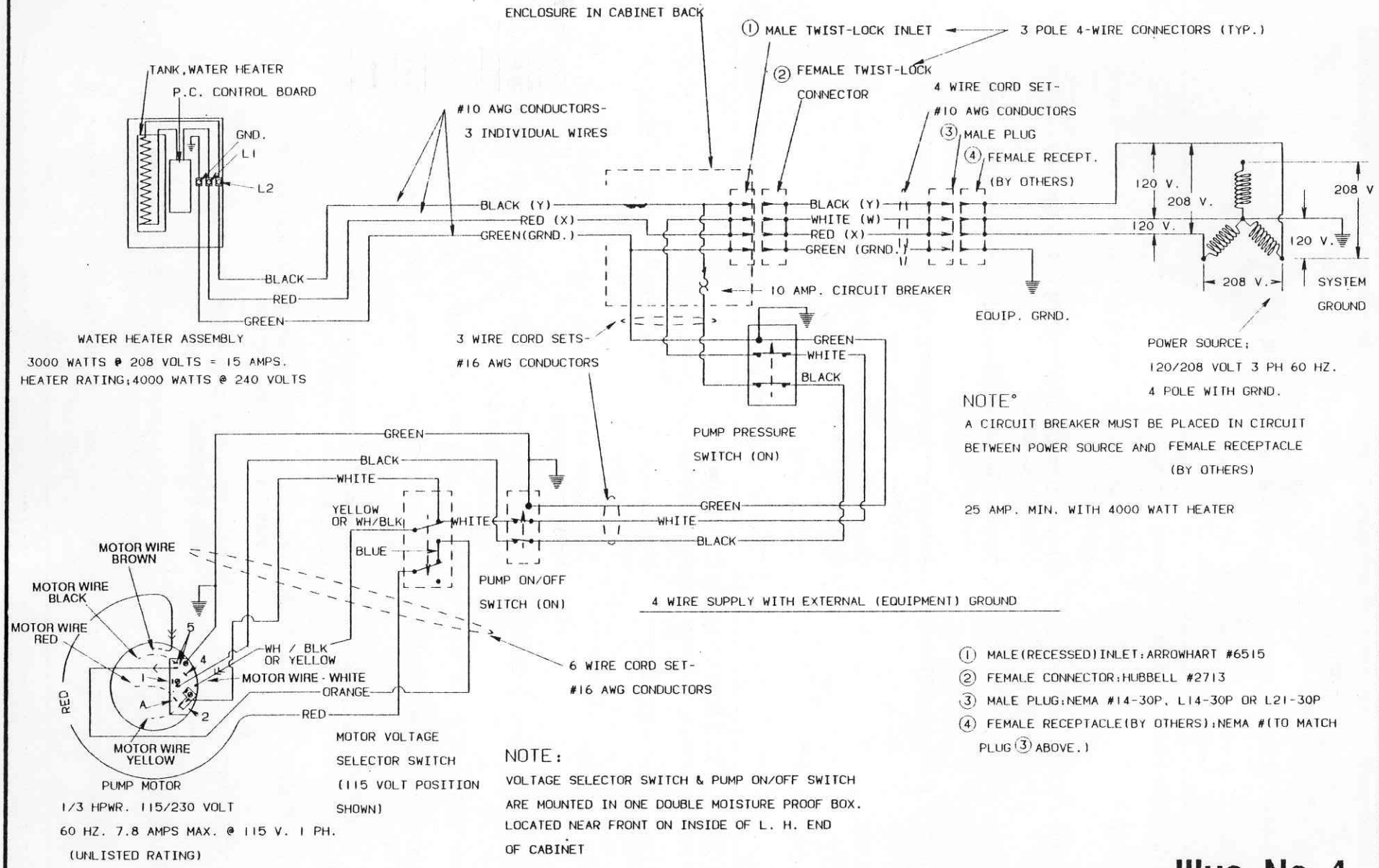
Periodic Maintenance Schedule: (While unit is in use)

1. WATER FILTER	Inspect and clean monthly or sooner, should water flow be restricted.
2. WATER SUPPLY HOSE	Deterioration and/or damage. Monthly inspection - replace or repair as necessary.
3. WASTE OUTLET HOSE	Deterioration and/or damage. Monthly inspection - replace or repair as necessary.
4. SOFT-FLO NOZZLE ON FAUCET AND GOOSENECK	Remove and clean monthly or sooner should water flow be restricted.
5. WATER LEAKS	Check daily: tighten joint fittings and/or replace defective components as received.
6. INTERIOR OF CABINET	Clean weekly.
7. SINK BOWL/TOP	Clean as deemed necessary to maintain sanitary conditions.

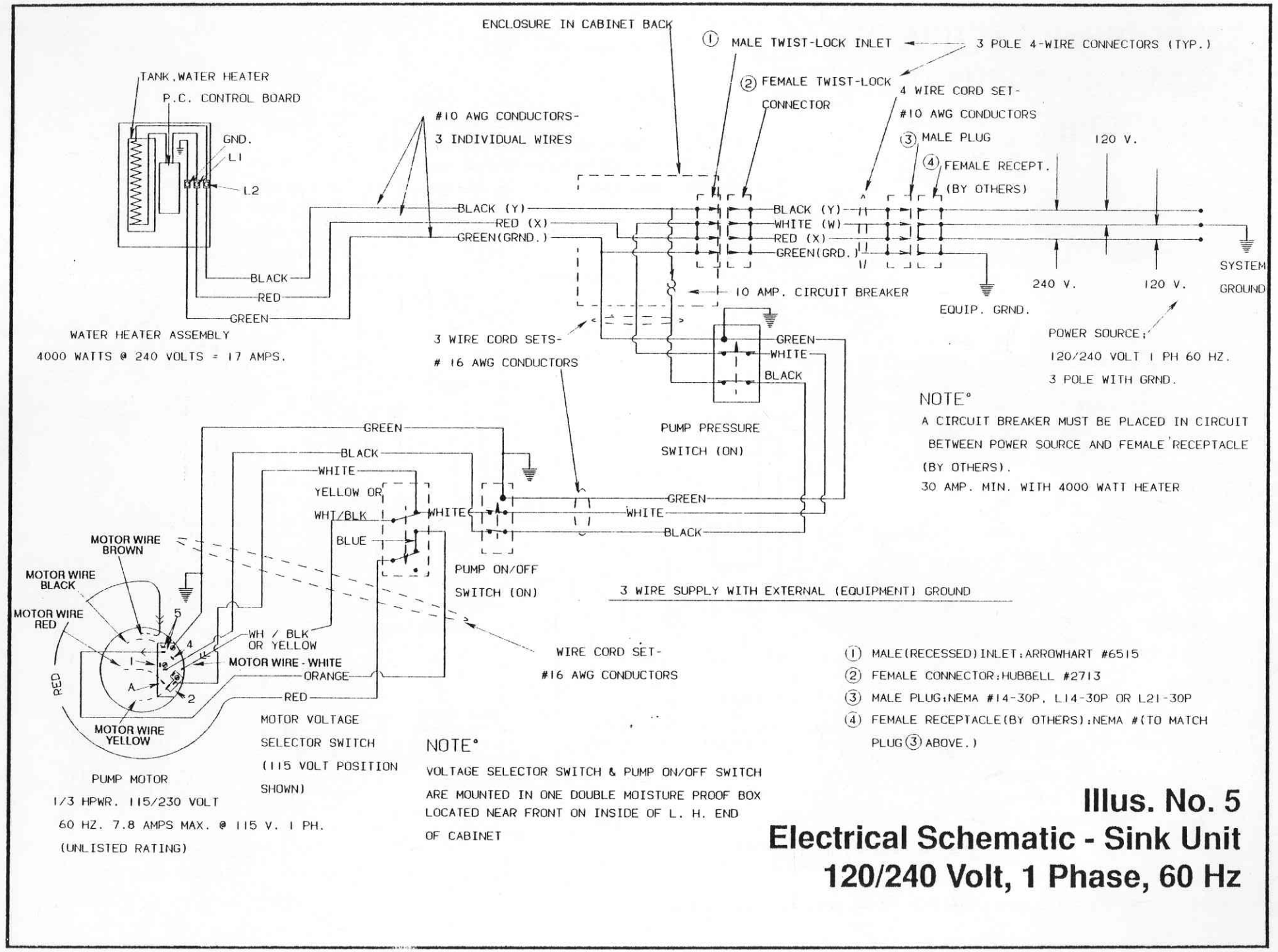
Long Term Storage and Maintenance Schedule:

(Store within a sheltered area at moderate humidity and temperature levels)

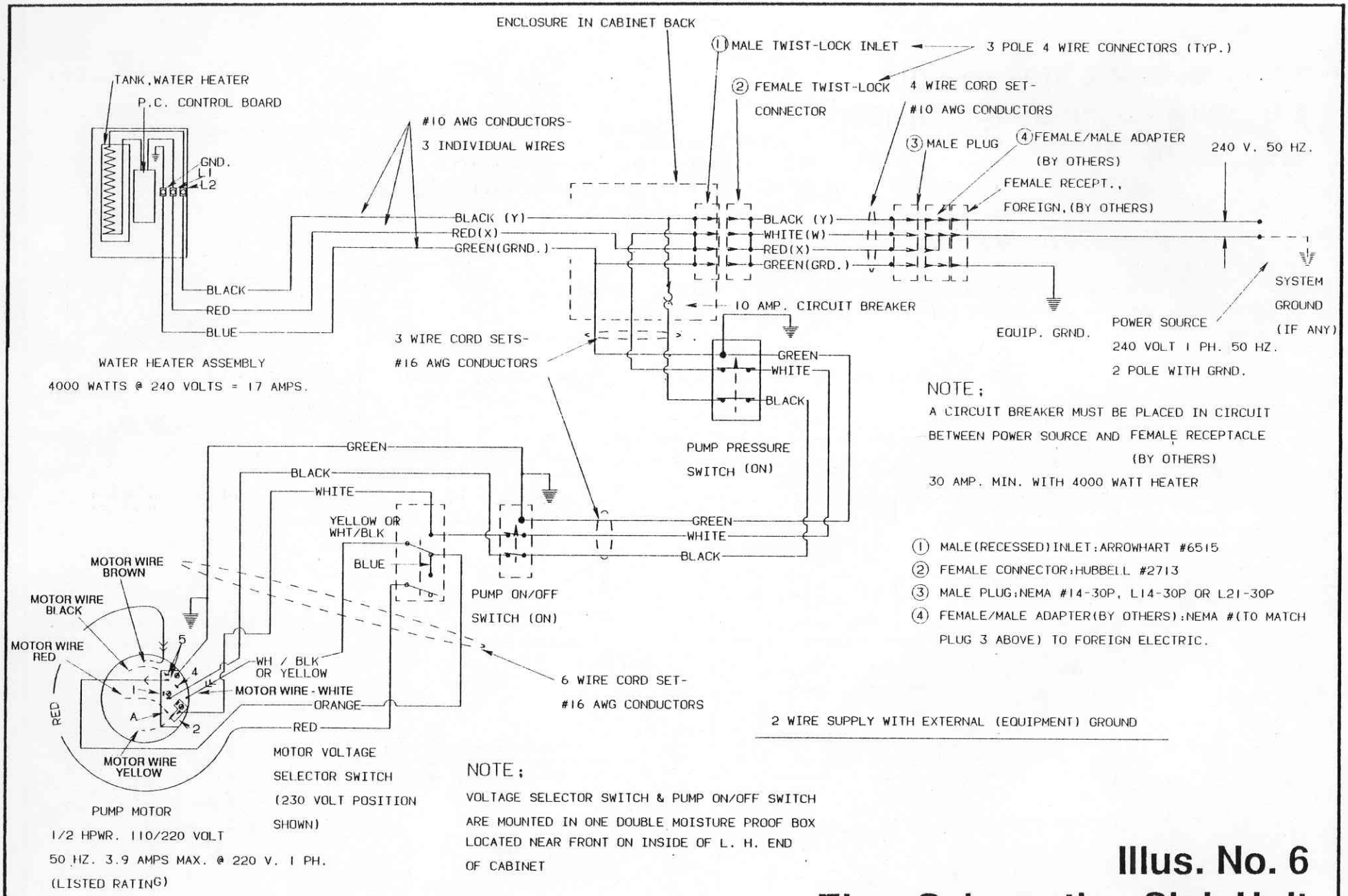
1. WATER SUPPLY HOSE ASSEMBLY	Deterioration and/or damage. Yearly inspection - replace or repair as required.
2. WASTE OUTLET HOSE	Deterioration and/or damage. Yearly inspection - replace or repair as required.
3. ELECTRICAL UMBILICAL (EXTENSION	Deterioration and/or damage. Yearly inspection - replace or repair CORD) as required.
4. CASTER WHEELS	Free wheeling. Yearly inspection. Lightly oil or grease bearings.
5. ELECTRICAL INLET AND WATER QUICK CONNECTOR	Corrosion and/or obstructions. Yearly inspection. Replace or repair as required.
6. INTERNAL ELECTRICAL CORDS AND WATER PIPING	Deterioration and/or damage. Yearly inspection. Replace defective components.
7. MISSING PARTS AND/OR ACCESSORIES	Resupply as necessary. See pages 20,21,22 and 23 for Parts/ Accessory List. Yearly inspection.
8. PUMP MOTOR SHAFT	Rotate manually to prevent seizure at bearings or pump seal. Yearly inspection.
9. MOTOR BEARINGS	Permanently lubricated - inspect for "DRY" bearings, after 5 years of storage. Replace bearings or motor.
10. CABINET - DAMAGE OR RUSTING	Yearly inspection - Repair minor damage and/or remove rust and "Touch Up Paint".



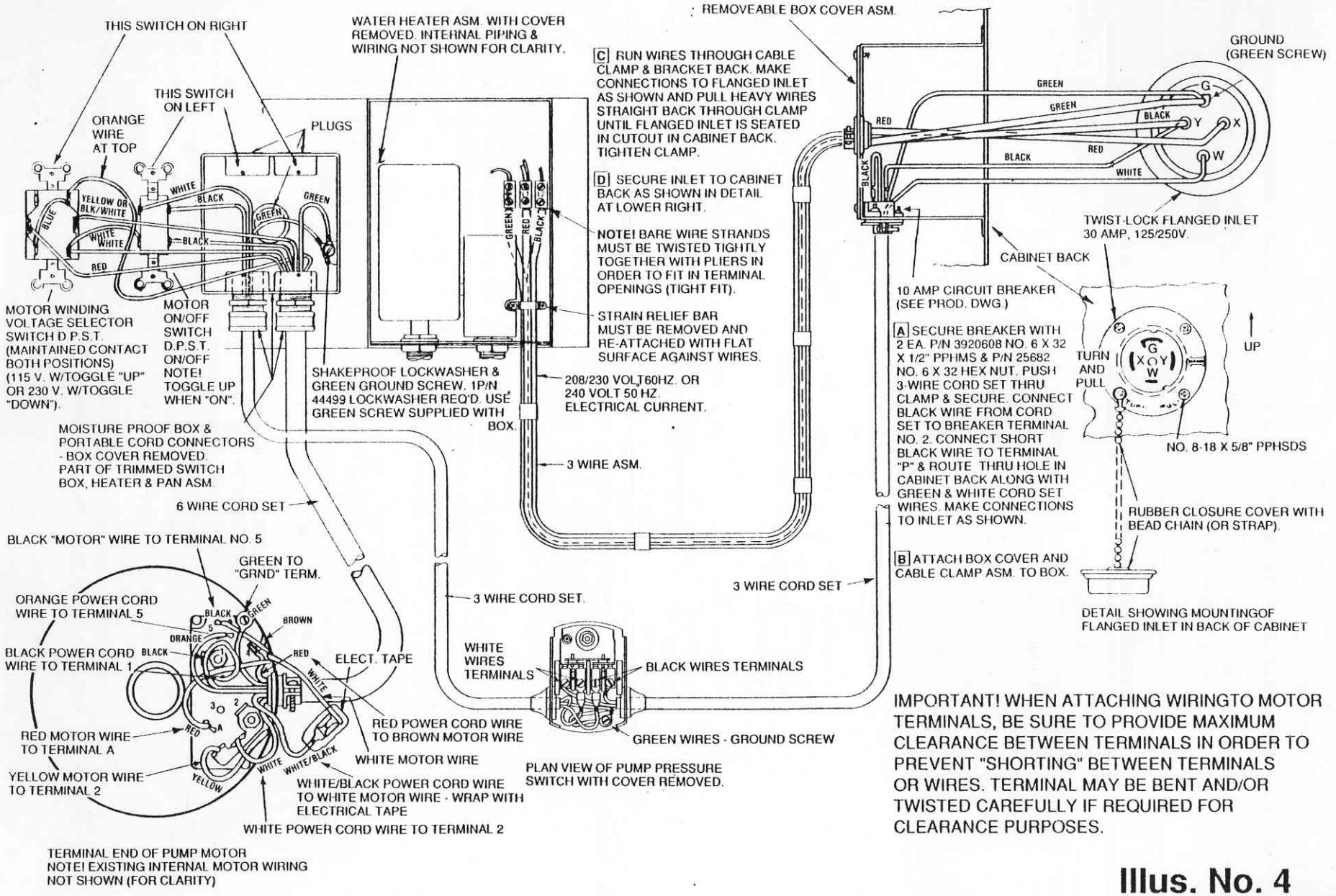
Illus. No. 4
Electrical Schematic - Sink Unit
120/208 Volt, 3 Phase, 60 Hz


ENCLOSURE IN CABINET BACK
① MALE TWIST-LOCK INLET
3 POLE 4-WIRE CONNECTORS (TYP.)
② FEMALE TWIST-LOCK CONNECTOR
4 WIRE CORD SET- #10 AWG CONDUCTORS
③ MALE PLUG
④ FEMALE RECEPT. (BY OTHERS)
120 V.
TANK, WATER HEATER
P.C. CONTROL BOARD
GND.
L1
L2
#10 AWG CONDUCTORS- 3 INDIVIDUAL WIRES
BLACK (Y)
RED (X)
GREEN(GRND.)
BLACK
RED
GREEN
WATER HEATER ASSEMBLY
4000 WATTS @ 240 VOLTS = 17 AMPS.
10 AMP. CIRCUIT BREAKER
240 V.
120 V.
SYSTEM GROUND
EQUIP. GRND.
POWER SOURCE; 120/240 VOLT 1 PH 60 HZ. 3 POLE WITH GRND.
3 WIRE CORD SETS- # 16 AWG CONDUCTORS
GREEN
WHITE
BLACK
PUMP PRESSURE SWITCH (ON)
NOTE°
A CIRCUIT BREAKER MUST BE PLACED IN CIRCUIT BETWEEN POWER SOURCE AND FEMALE RECEPTACLE (BY OTHERS).
30 AMP. MIN. WITH 4000 WATT HEATER
GREEN
BLACK
WHITE
YELLOW OR WHT/BLK
BLUE
PUMP ON/OFF SWITCH (ON)
3 WIRE SUPPLY WITH EXTERNAL (EQUIPMENT) GROUND
MOTOR WIRE BROWN
MOTOR WIRE BLACK
MOTOR WIRE RED
MOTOR WIRE YELLOW
WH / BLK OR YELLOW
MOTOR WIRE - WHITE
ORANGE
RED
WIRE CORD SET- #16 AWG CONDUCTORS
MOTOR VOLTAGE SELECTOR SWITCH (115 VOLT POSITION SHOWN)
PUMP MOTOR
1/3 HPWR. 115/230 VOLT
60 HZ. 7.8 AMPS MAX. @ 115 V. 1 PH.
(UNLISTED RATING)
NOTE°
VOLTAGE SELECTOR SWITCH & PUMP ON/OFF SWITCH ARE MOUNTED IN ONE DOUBLE MOISTURE PROOF BOX LOCATED NEAR FRONT ON INSIDE OF L. H. END OF CABINET
① MALE(RECESSED) INLET: ARROWHART #6515
② FEMALE CONNECTOR: HUBBELL #2713
③ MALE PLUG: NEMA #14-30P, L14-30P OR L21-30P
④ FEMALE RECEPTACLE (BY OTHERS): NEMA #(TO MATCH PLUG ③ ABOVE.)

Illus. No. 5
Electrical Schematic - Sink Unit
120/240 Volt, 1 Phase, 60 Hz



Illus. No. 6
Elec. Schematic - Sink Unit
240 Volt, 1 Phase, 50 Hz

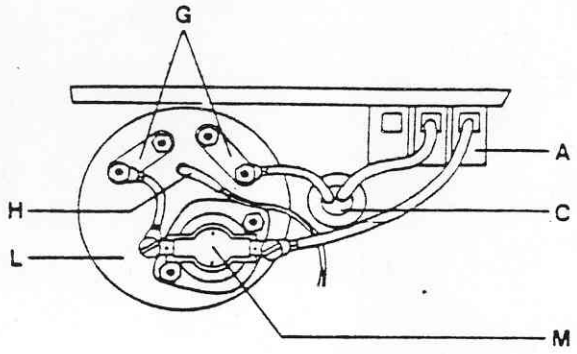

THIS SWITCH ON RIGHT
THIS SWITCH ON LEFT
ORANGE WIRE AT TOP
PLUGS
WATER HEATER ASM. WITH COVER REMOVED. INTERNAL PIPING & WIRING NOT SHOWN FOR CLARITY.
REMOVEABLE BOX COVER ASM.
GROUND (GREEN SCREW)
C RUN WIRES THROUGH CABLE CLAMP & BRACKET BACK. MAKE CONNECTIONS TO FLANGED INLET AS SHOWN AND PULL HEAVY WIRES STRAIGHT BACK THROUGH CLAMP UNTIL FLANGED INLET IS SEATED IN CUTOUT IN CABINET BACK. TIGHTEN CLAMP.
D SECURE INLET TO CABINET BACK AS SHOWN IN DETAIL AT LOWER RIGHT.
NOTE! BARE WIRE STRANDS MUST BE TWISTED TIGHTLY TOGETHER WITH PLIERS IN ORDER TO FIT IN TERMINAL OPENINGS (TIGHT FIT).
STRAIN RELIEF BAR MUST BE REMOVED AND RE-ATTACHED WITH FLAT SURFACE AGAINST WIRES.
TWIST-LOCK FLANGED INLET 30 AMP, 125/250V.
CABINET BACK
10 AMP CIRCUIT BREAKER (SEE PROD. DWG.)
A SECURE BREAKER WITH 2 EA. P/N 3920608 NO. 6 X 32 X 1/2" PPHMS & P/N 25682 NO. 6 X 32 HEX NUT. PUSH 3-WIRE CORD SET THRU CLAMP & SECURE. CONNECT BLACK WIRE FROM CORD SET TO BREAKER TERMINAL NO. 2. CONNECT SHORT BLACK WIRE TO TERMINAL "P" & ROUTE THRU HOLE IN CABINET BACK ALONG WITH GREEN & WHITE CORD SET WIRES. MAKE CONNECTIONS TO INLET AS SHOWN.
TURN AND PULL
UP
NO. 8-18 X 5/8" PPHSDS
RUBBER CLOSURE COVER WITH BEAD CHAIN (OR STRAP).
B ATTACH BOX COVER AND CABLE CLAMP ASM. TO BOX.
DETAIL SHOWING MOUNTINGOF FLANGED INLET IN BACK OF CABINET
MOTOR WINDING VOLTAGE SELECTOR SWITCH D P.S.T. (MAINTAINED CONTACT BOTH POSITIONS) (115 V. W/TOGGLE "UP" OR 230 V. W/TOGGLE "DOWN").
MOTOR ON/OFF SWITCH D.P.S.T. ON/OFF NOTE! TOGGLE UP WHEN "ON".
SHAKEPROOF LOCKWASHER & GREEN GROUND SCREW. 1P/N 44499 LOCKWASHER REQ'D. USE GREEN SCREW SUPPLIED WITH BOX.
208/230 VOLT 60HZ. OR 240 VOLT 50 HZ. ELECTRICAL CURRENT.
3 WIRE ASM.
MOISTURE PROOF BOX & PORTABLE CORD CONNECTORS - BOX COVER REMOVED. PART OF TRIMMED SWITCH BOX, HEATER & PAN ASM.
6 WIRE CORD SET
3 WIRE CORD SET.
3 WIRE CORD SET
BLACK "MOTOR" WIRE TO TERMINAL NO. 5
GREEN TO "GRND" TERM.
ORANGE POWER CORD WIRE TO TERMINAL 5
BLACK POWER CORD WIRE TO TERMINAL 1
ELECT. TAPE
RED MOTOR WIRE TO TERMINAL A
YELLOW MOTOR WIRE TO TERMINAL 2
RED POWER CORD WIRE TO BROWN MOTOR WIRE
WHITE MOTOR WIRE
WHITE/BLACK POWER CORD WIRE TO WHITE MOTOR WIRE - WRAP WITH ELECTRICAL TAPE
WHITE POWER CORD WIRE TO TERMINAL 2
TERMINAL END OF PUMP MOTOR
NOTE! EXISTING INTERNAL MOTOR WIRING NOT SHOWN (FOR CLARITY)
WHITE WIRES TERMINALS
BLACK WIRES TERMINALS
GREEN WIRES - GROUND SCREW
PLAN VIEW OF PUMP PRESSURE SWITCH WITH COVER REMOVED.
IMPORTANT! WHEN ATTACHING WIRINGTO MOTOR TERMINALS, BE SURE TO PROVIDE MAXIMUM CLEARANCE BETWEEN TERMINALS IN ORDER TO PREVENT "SHORTING" BETWEEN TERMINALS OR WIRES. TERMINAL MAY BE BENT AND/OR TWISTED CAREFULLY IF REQUIRED FOR CLEARANCE PURPOSES.

Illus. No. 4
Pictorial Wiring Diagram

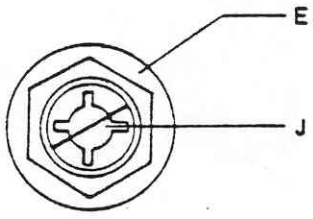
Chart No. 1
Trouble Shooting - Super Power Pack

WARNING: If you do not have experience using test equipment on high voltage appliances, have a licensed electrician perform all ELECTRICAL tests below:

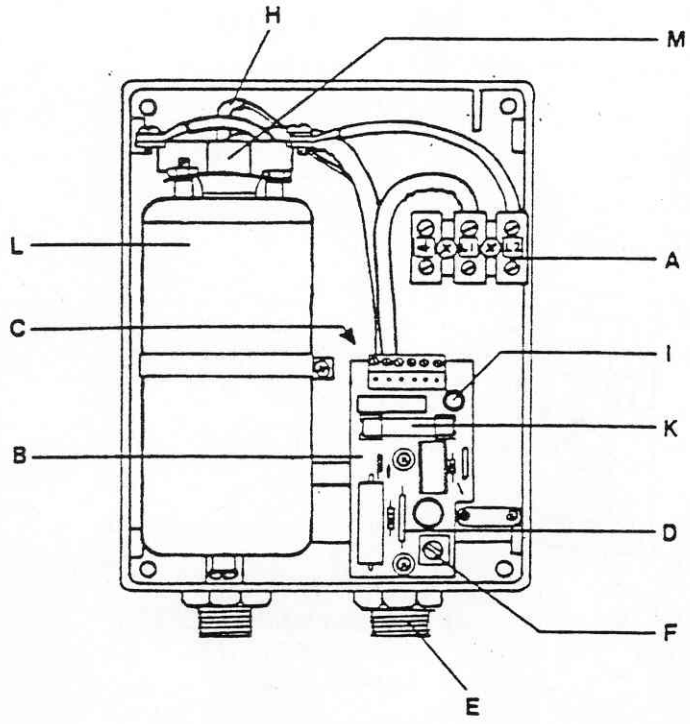
SYMPTOM	POSSIBLE CAUSE	SOLUTION
No Heat — Indicator Light I Does Not Come On.	1. Check power supply to heater at circuit breaker. A tripped breaker indicates short circuit or undersized breaker.	Locate short, or install correct size circuit breaker if undersized.
	2. With power ON, check voltage at terminal block **A**. Reading should be 208V to 240V between L1 and L2 terminal.	Voltage in the 110V range indicates incorrect wiring at Service Box.
	3. ECO (Energy Cut-Out) **M** may be open circuit. Check continuity across Cut-Out terminals.	Replace ECO if there is no continuity.
	4. Check fuse **K** on PCB (Printed Circuit Board) **B** by inserting a slip of white paper behind fuse and looking closely for a possible break. Make sure power is OFF.	Replace fuse, if blown or broken. If fuse blows again, replace triac **C**, located behind PCB.
	5. Check for continuity at reed switch **D** with water flowing and power OFF. If there is no continuity, bring a magnet close to reed switch and look for continuity again.	If in second test you read continuity, flow switch magnet **J** is jammed or missing — disconnect heater and check inlet **E**. If there is no continuity, replace PCB **B**..
Low Temperature	1. Flow rate too high. Check flow by timing fill of a graduated container, such as a ½ gal. milk container, and comparing to Temp. Rise and Flow Charts.	Reduce flow rate gradually to see if a hotter temperature can be achieved.
	2. Temperature control **F** is in wrong position. Hottest position is clockwise on most heaters, but refer to installation instructions to be sure. If control is in low temp. position, light will be pulsing regularly.	Turn temperature control in opposite direction. Light should be on more of the time, or fully on.
	3. Triac **C** may be allowing only 110V to element terminals **G**. Check voltage across terminals with power ON and water flowing.	Replace triac assembly if voltage is in the 110V range. (240V heaters only.)
	4. Thermistor (temp. sensor) **H** may be defective. Check for very erratic pulsing.	Replace Thermistor and leads.
Light Stays On Without Flow	1. Triac **C** may have failed in the "on" position., Pull fuse **K** on PCB **B**, turn power on and run a small amount of water through heater.	If heater heats up again when water flow stops, triac is stuck on and must be replaced.
	2. Flow switch magnet **J** may be stuck if in the test above, heater cooled down and stayed cool.	Disconnect heater and check water inlet **E** for jammed flow switch magnet.
	3. Element may have failed. Check for continuity across element terminals **G**.	If there is no continuity, replace water container assembly **L**.



TOP VIEW

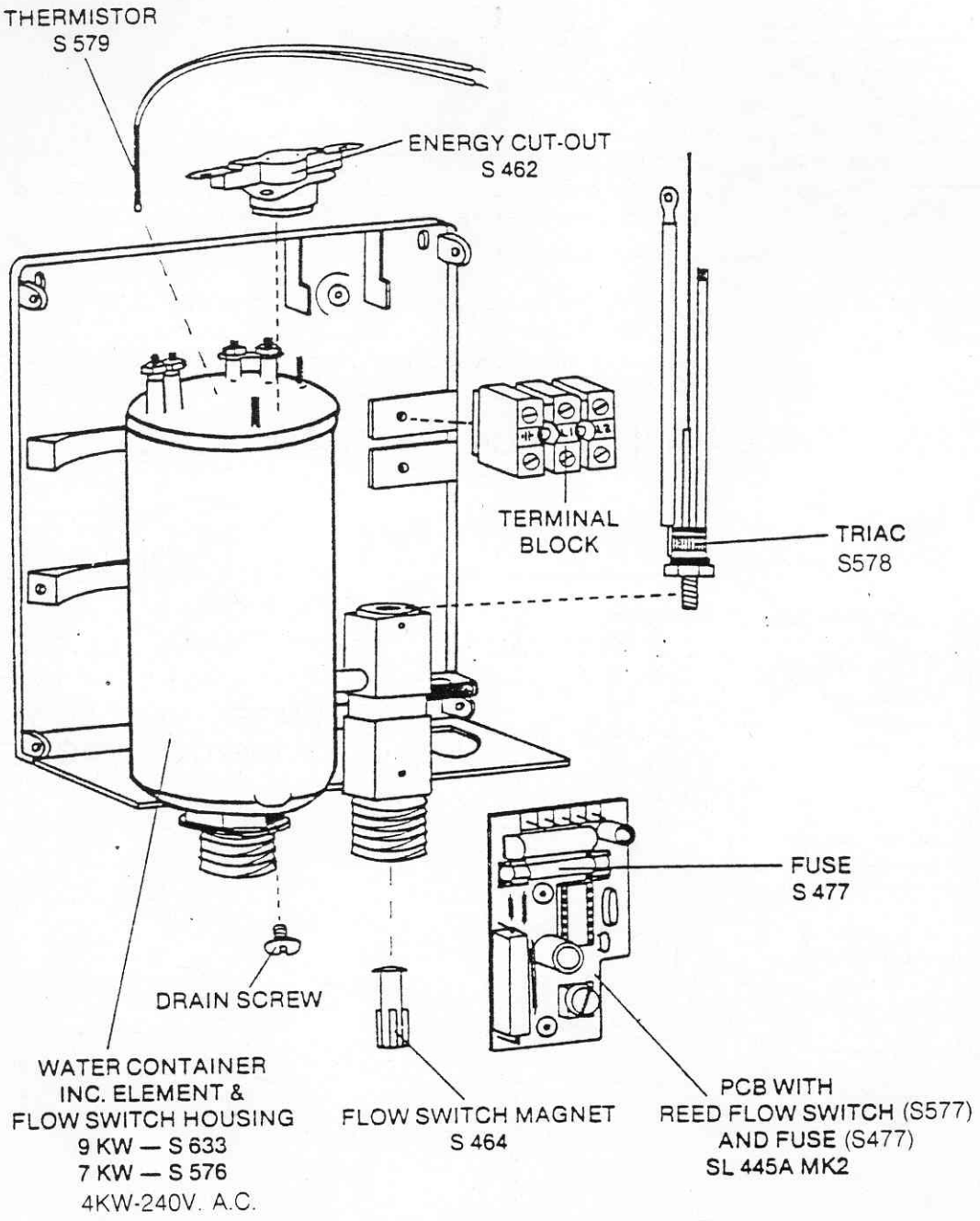


WATER INLET AND
FLOW SWITCH MAGNET



FRONT VIEW

Illus. No. 9
Replacement Parts List - Water Heater



Servicing and Disassembly - Water Heater and/or Switches

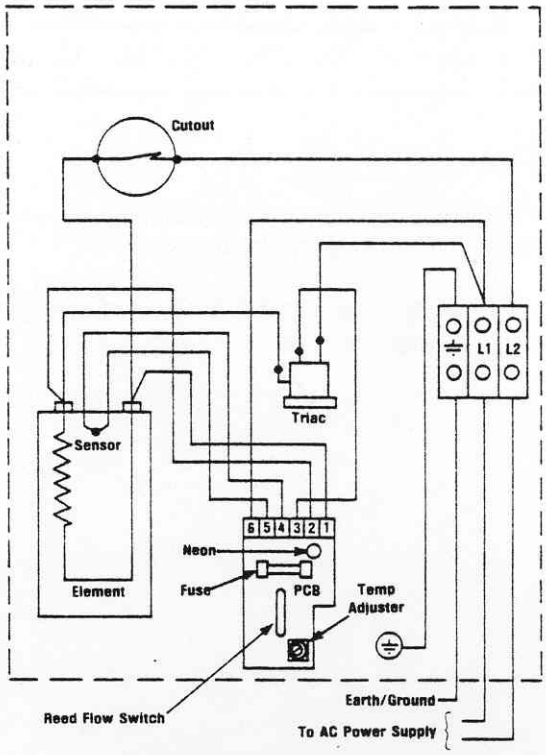
Caution: Before servicing water heater be sure electric power is disconnected or turned off at entrance box, water system pressure is relieved and water system is drained. See instructions elsewhere for proper draining procedure. Before servicing switches only, be sure electric power is disconnected or turned off at entrance box.

Note: Switches may be serviced within the cabinet if so desired. Should switches require replacement, see "Pictorial Wiring Diagram" elsewhere in these instructions, for proper connections and placement.

To remove water heater for servicing: Loosen pan head screws (4) holding heater and switch box mounting plate to side of cabinet. Slide assembly to the left (toward cabinet front) until screw heads line up with large portion of keyhole slots in plate and disengage plate from screws. Disconnect water lines from heater at compression ring & nut connections. Bring complete heater, switch and pan assembly out of cabinet to limit of electrical cords. Remove plastic heater cover by removing flat head screws (2 on each side) and pulling cover outward from heater. If it is necessary to remove heater from the mounting panel, loosen set screws in terminal block, remove strain relief bar, pull power supply wires out of terminal block and remove the 4 sheet metal screws that secure back of heater to the mounting pan. Heater can now be serviced on a work bench or be replaced. Re-assemble in reverse order being sure all electrical and water connections are securely tightened. See "Pictorial Wiring Diagram" found elsewhere in these instructions, for proper connections.

Note: If a replacement heater assembly is installed, it may be necessary to use fittings from "old" heater. Use pipe joint compound on threaded fittings. Water heater schematic is located elsewhere in these instructions.

Illus. No. 10
Electric Schematic - Water Heater Only



This Appliance must be Earthed/Grounded

Chart No. 2
Temperature/Flow Chart

Temperature Rise (°F)

	Flow Rate (GPM)																	
	.5	.6	.7	.8	.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.5	4.0**
1.0 KW	14	12	10	8.5	7.6	6.8	5.7	4.9	4.3	3.8	3.4	3.0	2.8	2.6	2.4	2.3	1.9	1.7
1.7 KW	23	19	17	15	13	12	10	8.3	7.2	6.4	5.8	5.2	4.8	4.4	4.1	3.8	3.2	2.9
2.2 KW	30	25	21	19	17	15	13	11	9.4	8.3	7.6	6.8	6.2	5.7	5.3	5.0	4.2	3.8
3.0 KW	41	34	29	26	23	20	17	15	13	11	10	9.3	8.5	7.9	7.3	6.8	5.8	5.1
4.0 KW	55	46	39	34	30	27	23	19	17	15	14	12	11	10	9.7	9.1	7.6	6.4
5.2 KW	71	59	51	44	39	36	30	25	22	20	18	16	15	14	13	12	10	8.9
7.0 KW	95	80	68	60	53	48	40	34	30	26	24	22	20	18	17	16	14	12
9.0 KW	124	102	88	77	68	62	51	44	39	34	31	28	26	24	22	21	18	16
Combinations																		
11 KW (7 + 4)	130*	125	107	94	83	76	62	54	48	42	38	34	32	29	27	26	22	19
14 KW (7 + 7)	130	130	130*	120	106	96	79	68	61	53	48	44	40	37	34	33	28	24
18 KW (9 + 9)	130	130	130	130	130*	124	102	88	78	68	62	56	52	48	44	42	36	31
21 KW (3 x 7)	130	130	130	130	130	130*	120	102	90	78	72	66	60	54	51	48	41	36
27 KW (3 x 9)	130	130	130	130	130	130	130	130*	117	102	93	84	78	72	66	63	54	47

Notes: * Maximum temperature is thermostatically limited to 140 °F on S series (Super Power Packs) and approximately 160°F on Standard Power Packs.

** For flow rates greater than 4 GPM, find temperature rise for 1/2 the rate desired from the chart, and multiply rise shown by 1/2.

Chart No. 3
Wire Sizing Chart

Maximum length of run for Wire Gauge and Amperage Load (Ft.)

Maximum Watts at 120V	AMPS	Wire Gauge 14 GA.	12 GA.	10 GA.	8 GA.	6 GA.
1200	10	45	70	115	180	285
1800	15	30	45	70	120	190
2400	20	--	35	55	90	145

Maximum Watts At 240V	AMPS	Wire Gauge 14 GA.	12 GA.	10 GA.	8 GA.	6 GA.
3600	15	60	95	150	240	380
4800	20	--	70	115	180	285
6000	25	--	--	90	140	230
7200	30	--	--	75	120	190
9600	40	--	--	--	90	140

Effect of Reduced Voltage on Output

Heaters designed for use on 220V-240V have an output rating in WATTS based on a full 240 Volts. If actual voltage is lower, output can be calculated as follows:

$$\text{Rated Wattage at 240V} \times \frac{\text{Actual Voltage}^2}{240\text{V}^2} = \text{Actual Wattage}$$

Chart No. 4
Pump Maintenance/Trouble Shooting

Lubrication:

The pump requires only water for lubrication and **Must not be run dry.**

The motor should be lubricated in accordance with the instructions on motor data label.

Draining:

See instructions elsewhere in this manual for proper procedure. **Note! Pump must be drained for servicing or to prevent freeze damage. Caution: Do not run pump after draining to prevent damage to mechanical pump seal.**

Problem:	Cause:	Remedy:
A. Pump does not deliver water or pressure	The pump is not full of water.	Stop the pump, fill it with water, check all line connections to make sure there are no air leaks and try again.
B. Low pressure. If pump delivers water, but at low pressure.	The motor is not up to speed.	See if you have proper voltage and tight wiring connections.
	The impeller or injector nozzle is partially plugged.	Check impeller and nozzle for rocks or debris. Refer to disassembly instructions for getting to impeller.
	Air is leaking into suction line.	Check suction line connections.
C. Low capacity	Your water level is deeper than 20 feet.	Pump can't pump below 20 feet.
	You are using too long a supply line from the water to the pump.	You should use a shorter supply line or use a closer water source.
	You have a plugged impeller or injector nozzle.	Check impeller and nozzle. Refer to disassembly instructions.
	The line from the pump to the water is partially plugged.	Check line.
	Inlet filter clogged.	Remove filter screen and clean.
D. Motor overheats	Improper voltage or wiring connections.	Check to see if your voltage is the same as indicated on the switch functions plate. Be sure all wiring connections are tight.
	Pump is operating almost continuously or intermittently with faucet closed.	Check for leaks in system and be sure faucet valves are closed tightly.
	Motor winding selector switch toggle at 115V. position when cabinet is connected to a 240V. 2 wire electric supply.	Move switch toggle to 240V position.
	Improper ventilation for the motor.	Check to see if motor is clean.
E. Loss of pressure when no water is used	Leaks in piping or valves.	Check connections.
	Water level drops below the end of the supply line.	Check and be sure of a plentiful supply of water to keep end of supply line submerged.
F. Motor will not start	Open switches, blown fuses or loose connections.	Check switch, fuses and connections.
	Motor winding selector switch toggle at 240V position when cabinet is connected to a 208 or 230V 3 wire electric supply.	Move switch toggle to 115V position
	Improper connections to motor.	Make sure connections are tight & properly wired.
G. Air logging (excessive air in line)	Air leaks in line.	Check connections.
	Water drops below the end of the supply line	Provice a plentiful supply of water or refill reservoir.
H. Gravelly noises inside pump (cavitation)	End of suction line in mud or sand.	Raise end of suction pipe or clean out reservoir.
	Restriction in water supply line.	Check and clean supply line and/or filter screen.

Service and Disassembly - Pump

Caution: Before servicing Pump, be sure electric power is disconnected or turned off, water system pressure is relieved and water system is drained.

When servicing pump, refer to "Parts List: Pump and Motor Assembly", "Parts List: Switch, Heater and Pump Assembly" and "Parts List: Pump and Motor Assembly".

If **shallow well injector** needs servicing, it can quickly be removed from pump case without disturbing pump or piping and is readily accessible from front of cabinet.

Should the **impeller, motor or seal** need servicing, disconnect water heater inlet piping at transition union on heater and remove ten sheet metal screws that hold pump support pan to cabinet bottom. Disconnect pump inlet piping at upper union. Slide complete pump, tank and pan assembly toward cabinet front just enough to allow access to tank outlet piping and disconnect cold water riser tube at adapter fitting. Pump, tank and pan assembly may now be removed from cabinet as far as electrical cords will allow which should be far enough to service pump and motor .

To service the impeller, seal or motor; remove the bolts (6) holding the pump case to the motor mounting bracket and the motor mounting bracket to the pump support pan. Remove the motor hold-down strap. Remove bracket and motor assembly from the pump case. This will expose the impeller. Unscrew the impeller from the shaft to reach the seal. To remove the motor for repair or replacement, loosen the two set screws in shaft coupling and the bolts (4) holding the motor to the mounting bracket. To remove 6 wire cord set from motor, remove plastic end cap, and loosen cable clamp on motor. Disconnect wires from terminals/unwrap taped terminals (2). **Important: 6 wire cord set connections on motor must be as shown on "pictorial wiring diagram" when installing motor.** Re-assemble in reverse order being sure all piping joints are tight, that rubber seals are placed in unions and "O" ring in the pump case and its sealing surfaces are clean. Moisten ring with water to aid assembly. **Do Not use oil or grease.** Prime pump and water system and test for proper operation and/or water leaks. See instructions elsewhere for proper priming procedure.

Special Tools and Test Equipment

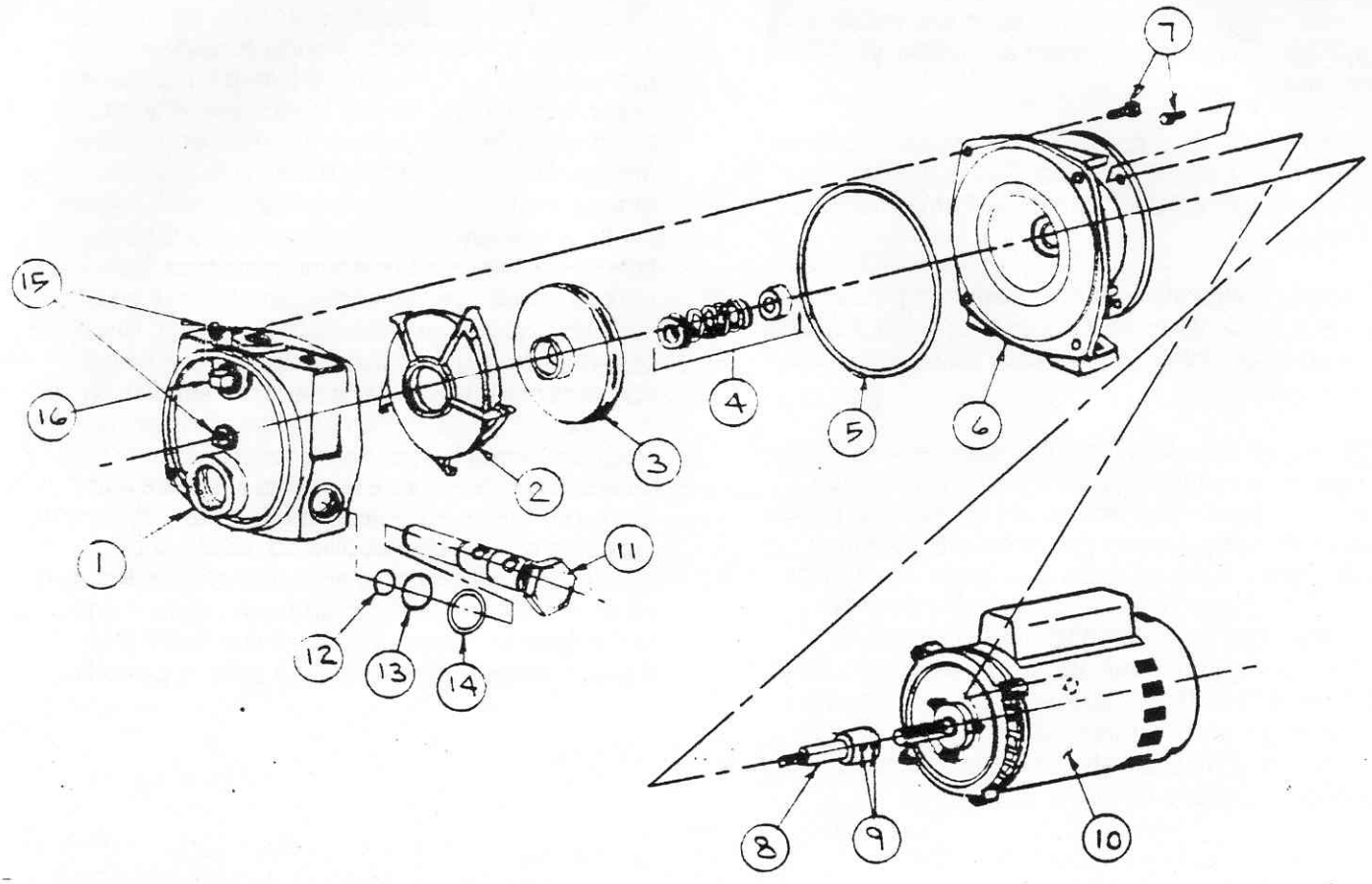
Tools:

Part Number	Description	Quantity	Function
618659	Wrench - Supplied	1	Internal water heater fittings.

Test Equipment: (Not Supplied)

1. Volt ohm meter.
2. Continuity Tester.
3. Immersible thermometer - capable of measuring 150° F.

Illus. No. 11
Parts List - Pump and Motor Assembly



Ref. No.	Part No.	Description	Qty.
1	03-0636-09	Pumpcase	1
2	06-0117-04	Diffuser, Lexan	1
3	05-3073-01	Impeller, Lexan	1
4	10-1203-01	Mechanical Seal, 3/4	1
5	47-0258-53	Assembly Square Ring	1
6	02-1100-05	Bracket	1
* 7	14-1292-25	Cap Screw 5/16-16 x 3/4 Hex. HD.	8
8	07-2152-05	Shaft Coupling	1
* 9	14-0002-02	Set Screw 5/16-18 x 3/8 Socket HD.	2
★10	9010-2799	Motor, 1/2 HPWR, 110/220V, 50Hz, 1PH, 2850RPM	1
11	18-0617-05	SW Injector Assem. Code #1219	1
12	47-0212-09	Venturi "O" Ring	1
13	47-0213-08	Nozzle "O" Ring	1
14	13-0137-01	Jet Gasket	1
*15	31-0059-11	1/4" I.P.S. Plug, Square HD.	2
*16	31-0063-07	1" I.P.S. Plug, Square HD.	1

Note:

All Part Nos. are "Jacuzzi Bros. Div." Numbers.

"*" Indicates "Common Hardware" parts and may be available locally.

"★" Indicates motor must be wired for "Clockwise" rotation when viewing motor from wiring terminal end.
Motor: G.E. Catalog No. C680, Model No. 5KC37MN134T Non-listed Rating: 1/3 HPWR, 115/230 V., 60 Hz, 1 PH., 3450 RPM.

Servicing and Adjustments - Pressure Tank and Pressure Switch

Important: Disconnect electrical power, drain water and relieve pressure in system.

Should the pressure tank be replaced for any reason, follow the adjusting and precharge requirements below.

Note! Pressure switch and tank originally installed in cabinet have been pre-set by cabinet manufacturer, to operate at approximately 25 P.S.I. **"on"** to approximately 60 P.S.I. **"off"** pressure gauge reading (although switch label may otherwise state) when connected to 115/230 V., 60 Hz., 1 PH. power.

Before installing new pressure tank, remove red plastic cap on **"closed"** end of new tank to expose **"Tire Style"** valve stem. Check existing air pressure in tank with a suitable gauge and add air, by means of the valve stem fitting, until a pressure of 25 P.S.I. is obtained in tank. Replace plastic cap on valve stem. New tank may now be fitted to pump assembly.

Note! A new pressure tank is normally precharged to 20 P.S.I. by the tank manufacturer.

If the tank only was replaced, electrical power can now be restored and water system primed to check for leaks and proper operation. Pressure switch may have to be **fine tuned"** at this time to assure proper operation of pump. See adjustment section below.

Should the pressure switch be replaced for any reason, the new switch will have to be adjusted to cut-in at 25 P.S.I. and cut-out at approximately 60 P.S.I. after fitting new switch to pump and attaching electric cords.

Note! Pressure gauge on pump body shall be used to monitor cut-in and cut-out pressure readings. Restore electrical power to cabinet, prime pump and let run until pump motor stops. Observe pressure reading on gauge. Check for water leaks at switch pipe fittings. Open cold water faucet and run water until pump motor starts. Observe pressure reading on gauge. Close cold water faucet valve and snap motor control switch located in moisture proff box to **"off"**. Remove cover on pressure switch and locate the 2 spring tension adjustment nuts on switch. **Caution: Do not touch wire terminals or current carrying components of the switch as these parts are "live" unless twist lock connector at back of cabinet has been disconnected or main circuit breaker is turned "off". Adjust spring tensions as necessary.**

Restore power and/or turn motor control switch **"on"**. Repeat **"on/off"** cycles and adjustments until pump motor cuts-in at 25 P.S.I. and cuts-out at approximately 60 P.S.I. readings on gauge when used on 60 Hz. electric system. Replace cover on pressure switch.

Note! Adjustment nuts: Clockwise rotation will increase and couterclockwise rotation will decrease motor cut-in and cut-out pressures. Large spring controls **"cut-in"** pressure and small spring controls **"cut-out" pressure.**

Parts List - Sink Unit - 30" Wide

ITEM NO.	HAMILTON PART NO.	VENDOR NAME	VENDOR PART NO.	PART DESCRIPTION	QTY.
1	17671			Faucet Assembly w/Jam & Riser Nuts	1
2	684695			Sink Assembly	1
* 3	618635			Crumb Cup Strainer Asm., St. Stl.	1
4	Part of Item 3			Tailpiece, St. Stl.	1
* 5	95704	Genova	17515	P-Trap, Polyprop.	1
6	18261	Southco	64-10-103-50	Latch Assembly	2
7	618626			Outside Head - R.H. Door	1
8	620268			Verticel Filler	4
9	610016			Hinge Mounting Angle (Door)	4
10	684706			Inside Head Asm. - R.H. & L.H. Door	1
11	70574			Warning Label	1
12	9920606			P.P.H.S.D.S. #6-18 x 3/8 - St. Stl.	16
13	618612			Strike Plate, Door Latch	2
14	29259			Pop Rivet - 1/8 x .294 - Anod. Alum.	4
15	618631			Strike	2
16	12853			Rubber Bumper	2
17	29258			Pop Rivet - 3/16 x 7/16 - Anod. Alum.	36
18	684708			Door Assembly - R.H. Swing	1
19	48598			Hinge	4
20	1120810			P.F.H.S.M.S. #8 x 5/8 - St. Stl.	32
21	610146			Front Corner Upright	2
22	14537			Retainer Clip	4
23	14538			Retainer Clip	2
24	610015			Hinge Mounting Angle (Cabinet)	4
25	14539			Retainer Clip, Hinge Angle	4
26	1920808			P.P.H.S.M.S. #8 x 1/2 - St. Stl.	12
27	1921008			P.P.H.S.M.S. #10 x 1/2 - St. Stl.	11
28	684705			Switch, Heater, Pump & Piping Assembly	1
29	34109			H.H.C.S. - 5/16-18 x 1/2 - St. Stl.	8
30	44501			5/16" Shakeproof Lockwasher (Ext.)	8
31	57657	Bassick	SB14696X2RP	Caster w/Brake	2
32	57656	Bassick	14696X2RP	Caster w/o Brake	2
33	57658	Bassick	32RP	180° Caster Socket Bracket	4
34	618610			Flush Bottom	1
35	618666			Skid, Plastic	2
36	618662			Bracket, Caster Storage	1
37	17757			Rubber Grommet, Small	1
38	618633			Manual "Pocket"	1
39	684712			Information Packet	1
40	684707			Door Assembly, L.H. Swing	1
41	618627			Outside Head - L.H. Door	1
42	618428			Handle Assembly	4
43	3920608			P.P.H.M.S. #6-32 x 1/2 - St. Stl.	2
44	49475	ARROWHART	6515	Electric Inlet Asm. - Twist Lock - 30 Amp.	1
45	49015	Hubbell	2898	Closure Cover Asm.	1
46	9920810			P.P.H.S.D.S. #8-18 x 5/8 - St. Stl.	3
** 47	618665			Electrical Supply Cord Assembly	1
** 48	684689			Waste Outlet Drain Hose Assembly	1
** 49	684686			Quick Connect Water Supply Hose & Filter Asm.	1
50	17777	McMaster Carr	9602K17	Rubber Grommet, Large	1
51	70576			Electric Inlet Label	1
* 52	49047			Electric Box/Cable Connector - w/Nut	1
53	618628			Electric Box Cover	1
54	684711			Body Assembly - 30" Wide	1
55	49894			Circuit Breaker - 10 Amp.	1

Illus. No. 12
Sink Unit - 30" Wide

ITEM NO.	HAMILTON PART NO.	VENDOR NAME	VENDOR PART NO.	PART DESCRIPTION	QTY.
56	25682			Hex Nut #6-32 - St. Stl.	1
57	618644			Wire Assembly - Black	1
58	61714	Bobrick	B-124	Soap Dispenser Assembly	1
*59	61817	Genova	53088	Hot Water Riser 35-3/4" P.B.	1
*60	44204			Washer 15/16 x 2-1/4 Dia. Flat	1
61	618673			Spacer	1
*62	61817	Genova	53088	Cold Water Riser 35-3/4" P.B.	1
*63	618639			Vinyl Drain Tube 3/8 I.D. x 18" Lg.	1
64	618745			Top Mounting Angle	1

* Indicates parts that may be available at larger hardware stores, plumbing supply shops or electrical supply houses. Substitutes are permitted providing that the designs and sizes permit such substitutions without affecting overall design or operations.

** See schedules A, B or C.

SCHEDULE A, REFERENCE NO. 49 CONSISTS OF:

HAMILTON PART NO.	VENDOR NAME	VENDOR PART NO.	PART DESCRIPTION	QTY.
45595	McMaster Carr	5316K49	1/2" M.P.T. Quick-Connect Plug, Brass	1
41478	McMaster Carr	9875-K71	1/2" F.P.T. Plastic In-Line Strainer, #40 Mesh	1
*46085	U.S. Plastics	27046	1/2" I.P.S. x 2" Lg. PVC Short Nipple	1
*45812	U.S. Plastics	27229	1/2" F.P.T. x 1/2" F.P.T. 90° PVC Elbow, Sch. 80	1
*45593	U.S. Plastics	61145	1/2" M.P.T. x 5/8" I.D. Hose Nylon Adapter	1
*618651	McMaster Carr	5288-K13	5/8" I.D. x 1.0" O.D. Double Braid Rubber Hose	120"
*90675	U.S. Plastics	57135	Snap-Grip Hose & Tubing Clamp	1

SCHEDULE B, REFERENCE NO. 48 CONSISTS OF:

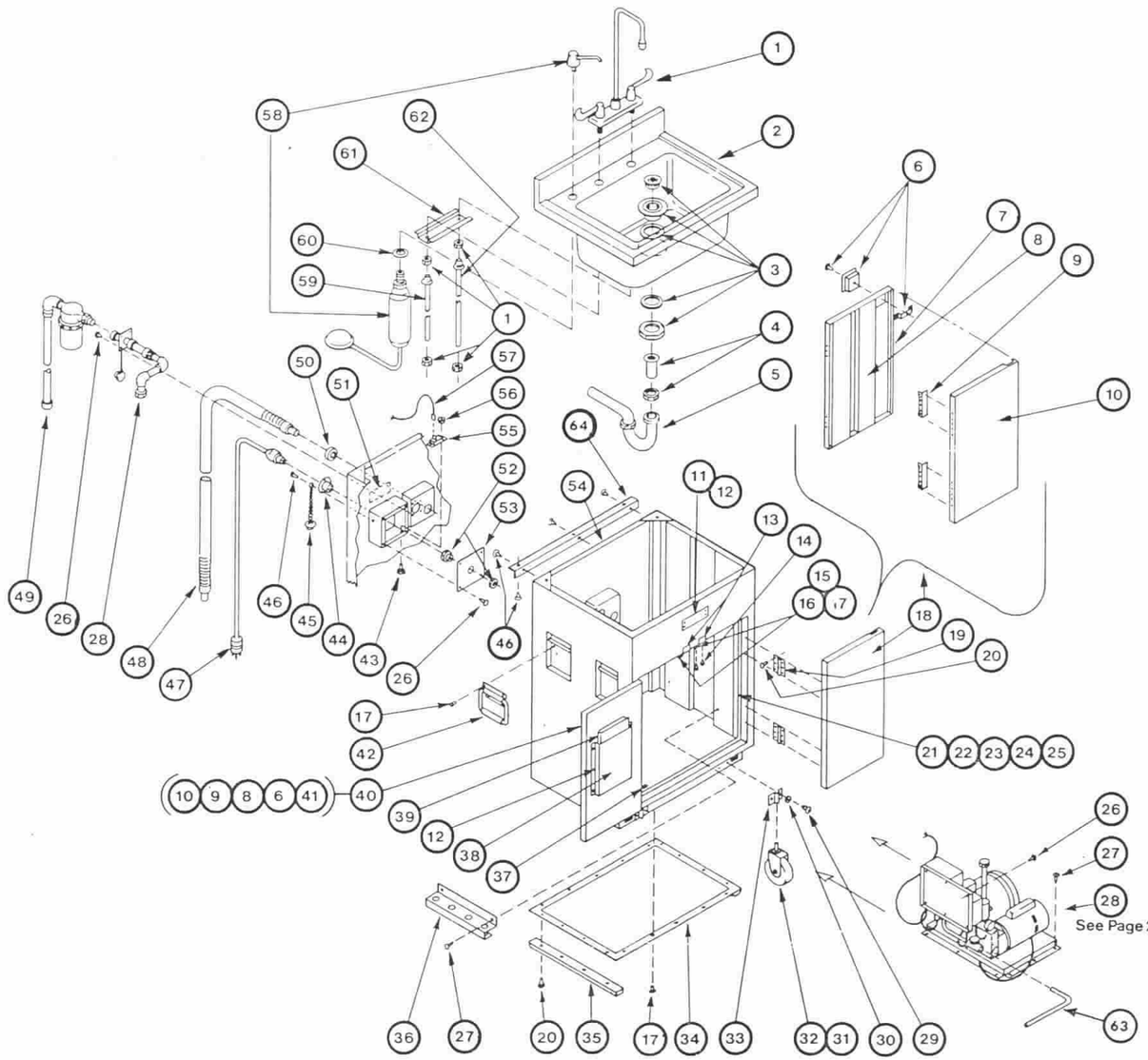
61713	U.S. Plastics	36028	1-1/2" I.D. "Ductail" Polyethylene Flexible Hose	84"
27414	U.S. Plastics	36038	1-1/2" I.D. "Ductail" Vinyl Hose End Fitting	2

SCHEDULE C, REFERENCE NO. 47 CONSISTS OF:

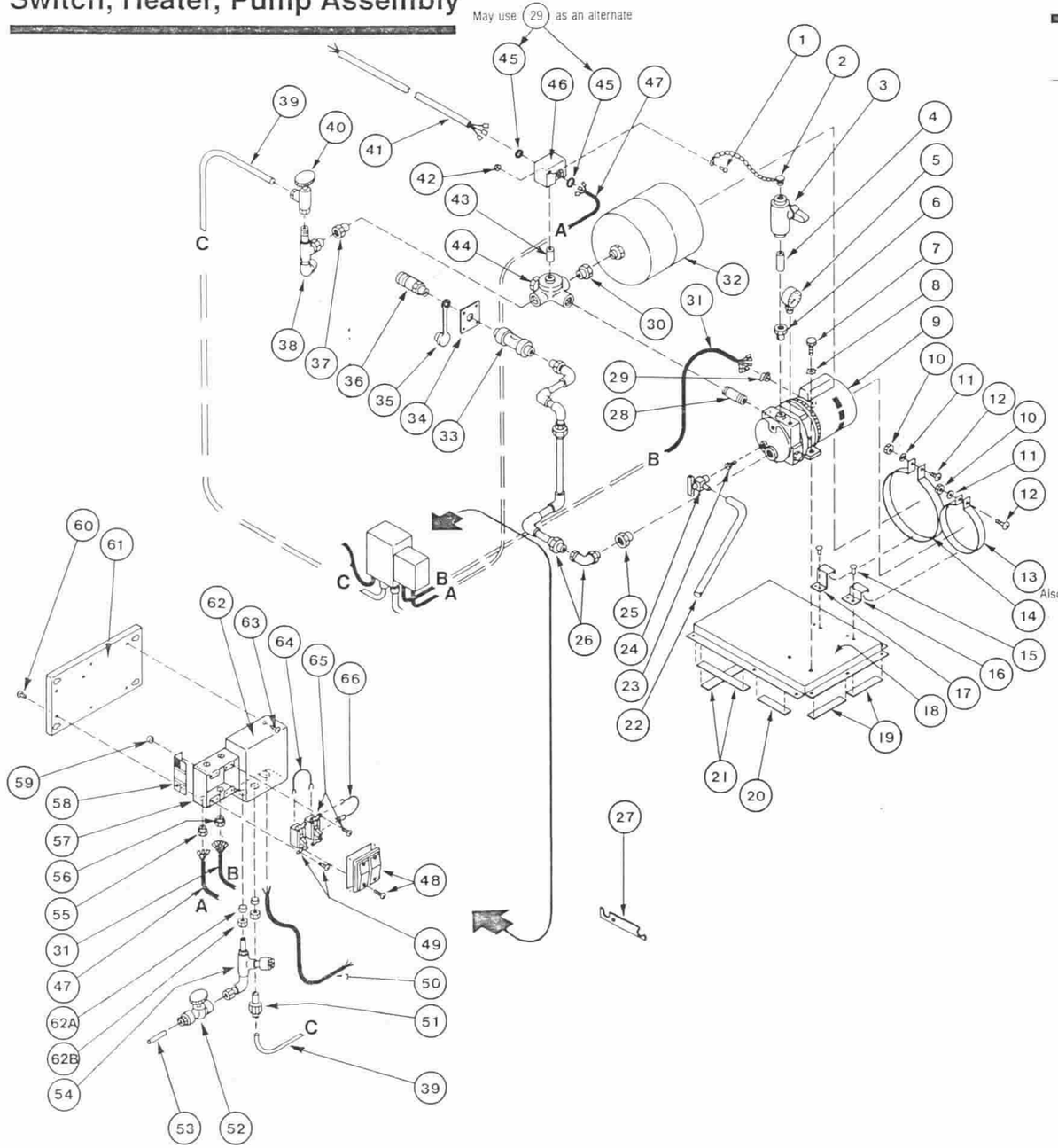
*618665			#10 AWG Type S.O. 4 Cond. Heavy Duty Portable Cord	108"
618665	Hubbell, Inc.	6035	"Seal-Tite" Rubber Boot	1
618665	Hubbell Inc.	2713	30 Amp. 4-Wire Twist-Lock Connector	1
See NOTE #1			30 Amp. Plug	1

NOTE 1 - NEMA Configuration has been determined by contracting officer at time of procurement and may be any one of the following: NEMA No. 14-30P-Hubbell No. 9431 or No. 9432 (or equal) Straight Blade 125/250V. 1∅, NEMA No. L14-30P-Hubbell No. 2711 (or equal) Twist Lock 125/250V. 1∅ or NEMA No. L21-30P-Hubbell No. 2811 (or equal) Twist Lock 120/208V. 3∅ "Y".

If a determination had not been made, the NEMA No. 14-30P style plug is furnished as standard (Hubbell No. 9431 or equal).



Illus. No. 13
Switch, Heater, Pump Assembly



Parts List - Switch, Heater, Pump Assembly

	ITEM NO.	HAMILTON PART NO.	VENDOR NAME	VENDOR PART NO.	PART DESCRIPTION	QTY.
	* 1	29258			Pop Rivet, 3/16 x .43 Anod. Alum.	1
See Sched. A	2	684688			Plug & Chain Asm.	1
	3	47447	US Plastics Corp	27352	3/4"I.P.S. Ball Valve - P.V.C. (Plastic)	1
	* 4	46086	US Plastics Corp	27352	3/4"I.P.S. x 2" Lg. Nipple P.V.C (Plastic)	1
	★ * 5	618667	Jacuzzi Bros.	3G8	Pressure Gauge 0 to 100 P.S.I. 1/4" F.P.T	1
	* 6	45392	US Plastics Corp	26007	I" M.P.T x 3/4" F.P.T Bushing - P.V.C (Plastic)	1
	*7	34110			5/16-18 x 7/8 Hex Hd. Cap Screw - St. Stl.	2
	* 8	44396			5/16" x .125 x .078 Kantlink Lockwasher	2
	★ 9	618667-2	Jacuzzi Bros.	JB9102-12B7	Pump & Motor Asm.	1
	*10	25710			#10-24 Hex Nut - St. Stl.	2
	*11	44499			#10 Shakeproof External Lockwasher	2
	*12	3921016			PPHMS #10-24 x I" St. Stl.	2
	13	618624			Motor Hold Down Strap	1
	14	618625			Water Tank Hold Down Strap	1
	*15	29258			Pop Rivet 3/16 x .43 - Anod. Alum.	4
	16	618623			Motor Support	1
	17	618622			Tank Support	1
	18	684690			Pan Asm., Pump Support	1
	19	618655			Insulator Strip., 5" Lg. Corr. Rubber	2
	20	618656			Insulator Strip., 7" Lg. Corr. Rubber	2
	21	618657			Insulator Strip., 8-3/4" Lg. Corr. Rubber	3
	*22	618639			Vinyl Drain Tube, 3/81.D. x 18" Lg.	1
	23	45395	Seal Products Inc	3200X4	1/4" F.P.T. x 1/4" M.P.T. Adapter, "Weatherhead"	1
	24	47448	Seal Products Inc	A6860	Compression Angle Shut-Off Valve,"Weatherhead"	1
	*25	45394	US Plastics Corp	26013	1-1/4" M.P.T. x 1/2" F.P.T. Bushing PVC (Plastic)	1
See Sched. B	26	684702			Inlet Piping Asm. (Cemented)	1
	*27	618659			Wrench, Internal Water Heater Fittings	1
	★ *28	6186673	McMaster Carr	4549K615	1" I.P.S. x 3-1/2" Lg. Pipe Nipple - Galv. Iron	1
Also Alternate to Ref. No. 45	*29	49047			1/2" K.O. Box/Cable Connector w/Nut	2 or 4
	★ *30	6186677	McMaster Carr	4535K62	1" M.P.T. x 3/4" F.P.T. Hex Bushing-Galv. Iron	1
	31	618664			6 Wire Cord Set (Motor to Selector Sw.)	1
	★ *32	6186678	Amtrol Model	WX-101	Water Tank ("Jacuzzi" No. PP-5)	1
	33	47446	US Plastics Corp	18291	1/2" F.P.T. Ball Check Valve PVC (Plastic)	1
	34	618658			Retaining Plate	
	35	94512	McMaster Carr	5248K73	Plastic Dust Plug - 1/2" Size	1
	36	45594	McMaster Carr	5316K23	1/2" M.P.T. Disconnect Socket - Brass	1
	*37	45393	US Plastics Corp	26008	1" M.P.T. x 1/2" F.P.T. Bushing - PVC (Plastic)	1
See Sched. C	38	684692			Outlet Piping Asm. (Cemented)	1
	*39	618661			Cold Water Supply Tube - Polybutylene	1
	*40	47445	Qest/U.S. Brass	QV-342	Angle Supply Valve I/2"Tubex3/8"P.B. (Plastic)	1
	41	618640			3 Wire Cord Set (Power Inlet to Sw.)	1
	42	44215			Flat Washer, Back Up St. Stl.	1
	★ *43	6186674	McMaster Carr	4549K532	1/4" I.P.S. x 1-1/2" Lg. Nipple - Galv. Iron	1
	★ 44	6186672	Jacuzzi Bros.	1GB	"Aqua-Genie" 80 Valve, Black Plastic	1
	★ 45	6186676	Jacuzzi Bros.	23-1120-06	Rubber Grommet	2
	★ *46	6186675	Jacuzzi Bros.	Sq. D Class 9013	Ser. B FSG2 Form U Pressure Sw. 20/40PSI (Jacuzzi P/N 0J8)	1
	47	618641			3 Wre Cord Set (Pump Sw. to On/Off Sw.)	1
	*48	59402	Mulberry Metal	30461	Moisture Prf. Box Cover w/Gasket & Screws	1
	*49	50146	Arrow Hart	12021	D.P.S.T. On/Off Switch w/Mntg. Screws	1
See Sched. E	50	618630			Heater Wire Asm. (3-No. 10AWG "THW" Bldg. Wire)	1
	*51	50879	Genova Inc.	53070	C.P.V.C. Street Adapter - 1/2" Tube x 3/8" P.B.	1
	*52	47442	Genova Inc.	53030	Straight Supply Valve C.P.V.C.	1
	*53	618637			Drain Tube - 3/8" O.D. x 2-3/4" Lg. P.B.	1
See Sched. D	54	684693			Heater Outlet Piping Asm. (Cemented)	1
	*55	48958	Appleton Co.	CG-2575	3/4" Straight Portable Cord Connector	1
	*56	48959	Appleton Co.	CG-5075	3/4" Straight Portable Cord Connector	1
	57	618663	Mulberry Metal	3059	Moisture Prf. Elec. Box w/2 - 3/4" Plugs	1

ITEM NO.	HAMILTON PART NO.	VENDOR NAME	VENDOR PART NO.	PART DESCRIPTION	QTY.
58	618654			Switch Functions Plate	1
*59	94511	Appleton Co.	PLG-75A	3/4" Screw-In Plug (Slotted)	1
*60	6921008			#10-32 x 1/2" P.P.H.T.C.S. - St. Stl.	3
61	618668			Support Pan (Switch Box & Heater)	1
★ 62	618669	Thermar	HP-424L	Tankless Elec. Water Heater - 240V. 4KW.	1
*63	1920808			#8 x 1/2" P.P.H.S.M.S. - St. Stl.	4
64	618642			White Switch-to-Switch Jumper Wire	1
65	50148	Pass & Seymour	1276	D.P.S.T. On/On Switch w/Mntg. Screws	1
66	618643			Blue "Selector" Switch Jumper Wire	1

* Indicates parts that may be available at larger hardware stores, plumbing supply shops or electrical supply houses. Substitutes are permitted providing that the designs and sizes permit such substitutions without affecting overall design or operations.

★ These parts may be ordered as a completed assembly. Order assembly number 618667.

★ Item No. 62 includes 2 ea. 5/8" ID compression rings (62A) & 1/2" compression nuts (62B).

SCHEDULE A, REFERENCE NO. 2 CONSISTS OF:

HAMILTON PART NO.	VENDOR NAME	VENDOR PART NO.	PART DESCRIPTION	QTY.
*94513	McMaster Carr	5481K18	3/4" M.P.T. Polyethylene Pipe Plug, Red	1
*618670	McMaster Carr	3606T51	#13 x 10" Lg. Bead Chain	1
*16548	McMaster Carr	3606T34	End Coupling for #13 Bead Chain	2
*44215			Flat Washer, Back-Up, St. Stl.	1
*29258			Pop Rivet 3/16" x .43 Anod. Alum.	1

SCHEDULE B, REFERENCE NO. 26 CONSISTS OF:

*45597	Genova Inc.	50405	1/2" Male Iron Pipe Adapter - C.P.V.C.	2
*618645	Genova Inc.	50005	Nipple - 1/2" C.P.V.C. Tubing x 1-1/8" Lg.	3
*45813	Genova Inc.	50705	1/2" 90° C.P.V.C. Elbow	6
*618650	Genova Inc.	50005	1/2" C.P.V.C. Pipe x 4" Long	1
*618647	Genova Inc.	50005	1/2" C.P.V.C. Pipe x 1-7/16" Long	2
*47383	Genova Inc.	530211	1/2" C.P.V.C. Union	2
*618649	Genova Inc.	50005	1/2" C.P.V.C. Pipe x 11-11/16" Long	1
*618648	Genova Inc.	50005	1/2" C.P.V.C. Pipe x 6-1/4" Long	1

SCHEDULE C, REFERENCE NO. 38 CONSISTS OF:

*618646	Genova Inc.	50005	Nipple - 1/2" C.P.V.C. Tubing x 2-3/4" Lg.	1
*47300	Genova Inc.	51405	1/2" x 1/2" x 1/2" C.P.V.C. Tee	1
*45597	Genova Inc.	50405	1/2" Male Iron Pipe Adapter	1
*618645	Genova Inc.	50005	Nipple - 1/2" C.P.V.C. Tubing x 1-1/8" Lg.	1
*45596	Genova Inc.	53060	C.P.V.C. Angle Adapter - 1/2" Tube x 3/8 P.B.	1

SCHEDULE D, REFERENCE NO. 54 CONSISTS OF:

*47300	Genova Inc.	51405	1/2" x 1/2" x 1/2" C.P.V.C. Tee	1
*50879	Genova Inc.	53070	C.P.V.C. Street Adapter - 1/2" Tube x 3/8" P.B.	1
*45811	Genova Inc.	52905	1/2" 90° C.P.V.C. Street Elbow	1
*618646	Genova Inc.	50005	Nipple - 1/2" C.P.V.C. Tubing x 2-3/4" Lg.	2

SCHEDULE E, REFERENCE NO. 50 CONSISTS OF:

*618630	#10 A.W.G. Type "THW" Building Wire-Black	40"
*618630	#10 A.W.G. Type "THW" Building Wire-Red	40"
*618630	#10 A.W.G. Type "THW" Building Wire-Green	40"

Design Change Notice (DCN)

1. Procurable Type Items

A. Design changes of in-house manufactured parts, to notify provisioning activity within 21 days after release for fabrication, accompanied by applicable SPTD.

B. Design changes of purchase type parts, to notify provisioning activity within 42 days after release for assembly, accompanied by applicable SPTD.

2. Nonprocurable Type Items

A. Design changes of in-house manufactured and purchase type parts, to notify provisioning activity within 60 days after release for fabrication and assembly, accompanied by applicable SPTD.

CONSUMABLE/DURABLE ITEM LIST

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

PART NO./ CATALOG	NOMENCLATURE	UNIT OF ISSUE	PRICE	SOURCE OF SUPPLY	SHELF LIFE CODE
NONE	NONE	NONE	NONE	NONE	NONE

KIT A

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

Non-Technician,
Enlisted Personnel
Field Environment

(1) ITEM NO.	(3) FSCM	(4) PRIME VENDOR P/N	(8) ITEM NAME	(10) QTY EI	(11) UI UNIT ISSU	(18) EC RATE IMPO	(19) SL SHELF LIFE	(20) PLT PROD. TIME	(21) UP UNIT PRICE	(22) QUP QTY UNIT PACK	(23) TOTAL QTY. REC.	(24) REMARKS REF. DWG. #. NSN
1	NONE	WOLVERINE BRASS PART OF #53571	CARTRIDGE PART OF FAUCET ASM.	1	EA	4	10 YRS	14 WKS	$12.00	1	5	IF FAUCET LEAKS, REPLACE #A17671
2	NONE	DON LOSS & ASSOC. BOBRICK #B-124	SOAP DISPENSER	1	EA	4	10 YRS	8 WKS	$198.00	1	5	NO REPLACE-MENT PARTS DWG. # #A61714
3	NONE	W.W. GRAINGER #2P132	SCREEN & STRAINER	1	EA	6	10 YRS	10 WKS	$24.00	1	5	#A41478
4	NONE	GUENTHER SUPPLY TYPE 1110	5/8" ID BLACK GEN. PURPOSE HOSE	10	FT	2	10 YRS	6 WKS	$1.00/ FT	1	50 FT.	#A618651
5	NONE	EAGLE SUPPLY #U-3	END FITTING 1/2" I.D.U-3	2	EA	2	10 YRS	8 WKS	$5.00	2	5	#A27414
6	NONE	AITKEN REED #618665	CORD ASM.	1	EA	2	10 YRS	10 WKS	$185.00	1	5	#B618665
7	NONE	MIDLAND PLASTICS 790-1008	VINYL PLASTIC TUBING .500 O.D. .375 ID	1.5	FT	2	10 YRS	6 WKS	$.50/FT	1.5 FT	8 FT	NO DWG.
8	NONE	US BRASS #QV-342	QV342 VALVE	1	EA	4	10 YRS	8 WKS	$6.00	1	5	#A47445
9	27901	US PLASTICS #27352	3/4" BALL VALVE	1	EA	3	10 YRS	8 WKS	$23.00	1	5	#A47447
10	NONE	TANKLESS WATER HEATER #S477	REPLACE FUSE #S477 FOR HP4024S	1	EA	2	10 YRS	10 WKS	$15.00	1	5	#A618669

MINIMUM ORDER OF $ 20.00 NET

KIT B1

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

Non-Technician, Enlisted Personnel Field Environment

(1) ITEM NO.	(3) FSCM	(4) PRIME VENDOR P/N	(8) ITEM NAME	(10) QTY EI	(11) UI UNIT ISSU	(18) EC RATE IMPO	(19) SL SHELF LIFE	(20) PLT PROD. TIME	(21) UP UNIT PRICE	(22) QUP QTY UNIT PACK	(23) TOTAL QTY. REC.	(24) REMARKS REF. DWG. #. NSN
1	NONE	WOLVERINE BRASS PART OF #53571	CARTRIDGE PART OF FAUCET ASM.	1	EA	4	10 YRS	14 WKS	$12.00	1	5	IF FAUCET LEAKS, REPLACE #A17671
2	NONE	DON LOSS & ASSOC. BOBRICK #B-124	SOAP DISPENSER	1	EA	4	10 YRS	8 WKS	$198.15	1	5	NO REPLACE-MENT PARTS DWG. # #A61714
3	NONE	W.W. GRAINGER #2P132	SCREEN & STRAINER	1	EA	6	10 YRS	10 WKS	$24.00	1	5	#A41478
4	NONE	GUENTHER SUPPLY TYPE 1110	5/8" ID BLACK GEN. PURPOSE HOSE	10	FT	2	10 YRS	6 WKS	$1.00/ FT	1	50 FT.	#A618651
5	NONE	EAGLE SUPPLY #U-3	END FITTING 1/2" I.D.U-3	2	EA	2	10 YRS	8 WKS	$5.00	2	5	#A27414
6	NONE	AITKEN REED #618665	CORD ASM.	1	EA	2	10 YRS	10 WKS	$185.00	1	5	#B618665
7	NONE	MIDLAND PLASTICS 790-1008	VINYL PLASTIC TUBING .500 O.D. .375 ID	1.5	FT	2	10 YRS	6 WKS	$.50/FT	1.5 FT	8 FT	NO DWG.
8	NONE	US BRASS #QV-342	QV342 VALVE	1	EA	4	10 YRS	8 WKS	$6.00	1	5	#A47445
9	27901	US PLASTICS #27352	3/4" BALL VALVE	1	EA	3	10 YRS	8 WKS	$23.00	1	5	#A47447
10	NONE	TANKLESS WATER HEATER #S477	REPLACE FUSE #S477 FOR HP4024S	1	EA	2	10 YRS	10 WKS	$15.00	1	5	#A618669

MINIMUM ORDER OF $ 20.00 NET

KIT B2

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

Technician,
Shop Environment

(1) ITEM NO.	(3) FSCM	(4) PRIME VENDOR P/N	(8) ITEM NAME	(10) QTY EI	(11) UI UNIT ISSU	(18) EC RATE IMPO	(19) SL SHELF LIFE	(20) PLT PROD. TIME	(21) UP UNIT PRICE	(22) QUP QTY UNIT PACK	(23) TOTAL QTY. REC.	(24) REMARKS REF. DWG. #. NSN
1	NONE	WOLVERINE BRASS #17671	FAUCET ASM.	1	EA	7	10 YRS WNTY 1 YR	14 WKS	$223.00	1	25	#A17671
2	NONE	DON LOSS & ASSOC. BOBRICK #B-124	SOAP DISPENSER	1	EA	4	10 YRS	8 WKS	$198.00	1	25	NO REPLACE-MENT PARTS DWG. # #A61714
3	NONE	GARVIN #1260 #100	STRAINER BASKET	1	EA	4	10 YRS	6 WKS	$17.00	1	25	#A41478
4	NONE	GENOVA #17515	1-1/2" PLASTIC "P" TRAP	1	EA	4	10 YRS	6 WKS	$ 4.00	1	25	#A95704
5	NONE	AITKEN REED #618665	CORD ASM.	1	EA	2	10 YRS	10 WKS	$185.00	1	25	#B618665
6	NONE	GENOVA #53021	1/2" PVC UNION	1	EA	4	10 YRS	8 WKS	$ 5.00	1	25	#47383
7	NONE	WW GRAINGER #2P132	STRAINER SCREEN	1	EA	6	10 YRS	10 WKS	$ 24.00	1	25	#A41478
8	27901	US PLASTICS #45593	ADAPTER HOSE END 1/2" MPT	1	EA	2	10 YRS	8 WKS	$ 1.00	1	25	#A45593
9	NONE	TANKLESS WATER HEATER #HP4024S	HEATER	1	EA	2	10 YRS WNTY 1 YR	10 WKS	$402.00	1	25	#A618669
10	NONE	NORMAN EQUIP. #BVHN8-8M	1/2" MPT BRASS Q.C. PLUG	1	EA	2	10 YRS	8 WKS	$ 22.00	1	25	#A45595
11	NONE	GUENTHER SUPPLY NO P/N	ELBOW, 1/2" PVC 80 T X T 90 DEGREES	1	EA	2	10 YRS	5 WKS	$ 3.00	1	25	#A45812
12	NONE	MIDLAND PLASITCS #46085	NIPPLE 1/2" IPS X 2" LONG PVC SCHEDULE 80	1	EA	2	10 YRS	8 WKS	$ 2.00	1	25	#A46805

MINIMUM ORDER OF $ 20.00 NET

KIT B2

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

Technician,
Shop Environment

(1) ITEM NO.	(3) FSCM	(4) PRIME VENDOR P/N	(8) ITEM NAME	(10) QTY EI	(11) UI UNIT ISSU	(18) EC RATE IMPO	(19) SL SHELF LIFE	(20) PLT PROD. TIME	(21) UP UNIT PRICE	(22) QUP QTY UNIT PACK	(23) TOTAL QTY. REC.	(24) REMARKS REF. DWG. #. NSN
13	27901	US PLASTICS #57135	HOSE CLAMP	1	EA	2	10 YRS	8 WKS	$ 1.00	1	25	#A90675
14	NONE	GRAYBAR ARROW HART #6515	INLET 3 POLE GROUNDING 30A 125/230V	1	EA	2	10 YRS	8 WKS	$34.00	1	25	#A49475
15	NONE	BENSON PUMP #JB9102-1288	JACUZZI PUMP ASM.	1	EA	2	10 YRS WNTY 1 YR	10 WKS	$424.00	1	25	#B618667
16	NONE	SOUTHCO #64-10-103-50	LATCH ST. ST.	1	EA	4	10 YRS	8 WKS	$ 16.00	1	25	#A18261
17	NONE	FLUID SYSTEM WEATHER - HEAD 6860	BRASS VALVE 3/8" OD X 1/4" MPT	1	EA	2	10 YRS	8 WKS	$ 9.00	1	25	#A47448
18	27901	US PLASTICS U45BCE	#1/2" CHEMTROL BALL CHECK VALVE	1	EA	2	10 YRS	8 WKS	$47.00	1	25	#A47446
19	NONE	GRAYBAR ARROWHEAD #12021	SWITCH, 15A 120-277 VAC	1	EA	2	10 YRS	8 WKS	$ 15.00	1	25	#A50146
20	NONE	GENOVA PRODUCTS #53070	ADAPTER GENOGRIP CPVC 1/2" ST X 3/8" OD	1	EA	2	10 YRS	8 WKS	$ 3.00	1	25	#A50879
21	NONE	WERNER ELECTRIC #P&S1276	SWITCH PASS & SEYMOUR	1	EA	2	10 YRS	8 WKS	$56.00	1	25	#A50148
22												
23												
24												
25												

MINIMUM ORDER OF $ 20.00 NET

KIT C

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

Upper Level Maintenance

(1) ITEM NO.	(3) FSCM	(4) PRIME VENDOR P/N	(8) ITEM NAME	(10) QTY EI	(11) UI UNIT ISSU	(18) EC RATE IMPO	(19) SL SHELF LIFE	(20) PLT PROD. TIME	(21) UP UNIT PRICE	(22) QUP QTY UNIT PACK	(23) TOTAL QTY. REC.	(24) REMARKS REF. DWG. #. NSN
1	NONE	HAMILTON ELKHORN #ETA46500P10	CIRCUIT BREAKER, OVERLOAD RELAY	1	EA	1	10 YRS	5 WKS	$ 11.00	1	50	#A49894
2	NONE	NORTHLAND PLASTICS #618666	NP-73 NATURAL SKID	1	EA	1	10 YRS	10 WKS	$ 2.00	1	1 PER	#B618217
3	NONE	CONSTRUCT-ION WORKSHOP #13-AD	CHAIN COUPLING W/ EYELET NICKEL PLATE	2	PER	1	10 YRS	8 WKS	$ 0.50	2	2 EA	#A16548
4	NONE	McMASTER CARR #5481K18	3/4" THREADED PLUG NPT SQ. HEAD	1	EA	1	10 YRS	8 WKS	$ 1.00	2	1 EA	#A94513
5	NONE	McMASTER CARR #3606Y51	BEAD CHAIN	.875	FT	1	10 YRS	2 WKS	$172.00 C FT	.875 FT	50 FT	#650-0001
6	NONE	AITKEN REED BELDEN #9422	CORD SET #16-7AWG "SO" 9422	1	EA	1	10 YRS	10 WKS	$ 15.00	1	50	#B618664
7	NONE	BENSON PUMP #JB9102-1288	JACUZZI PUMP ASM.	1	EA	1	10 YRS WNTY 1 YR	10 WKS	$724.00	1	50	#B618667
8	NONE	McMASTER CARR #5248K73	BLACK PLASTIC DUST PLUG 1/2"	1	EA	1	10 YRS	8 WKS	$ 5.00	1	50	#A94512
9	NONE	NORMAN EQUIPMENT #BVHC8-8M	SNAP-TITE QUICK CONNECT 1/2"	1	EA	1	10 YRS	8 WKS	$ 31.00	1	50	#A45594
10	NONE	ENGLEWOOD MULBERRY #30461	WEATHER-PROOF ELECTRIC COVER	1	EA	1	10 YRS	8 WKS	$ 14.00	1	50	#A59402
11	NONE	GENOVA PRODUCTS #53070	ADAPTER GENOGRIP CPVC 1/2" ST X 3/8"	1	EA	1	10 YRS	8 WKS	$ 3.00	1	50	#A50879
12	NONE	GENOVA PRODUCTS #53030	VALVE 1/2" X 3/8" OD PB	1	EA	1	10 YRS	8 WKS	$ 9.00	1	50	#A47442
13	27901	US PLASTICS #30-30581	STREET ELBOW, 1/2" 90 DEGREE CPVC	1	EA	1	10 YRS	8 WKS	$ 1.00	1	50	#A45811

MINIMUM ORDER OF $ 20.00 NET

KIT C

Solicitation No.: DLA120-89-D-8559
Contractor: Hamilton Industries, Inc.
Date of List: 10/9/90
Revision: 2

Upper Level Maintenance

(1) ITEM NO.	(3) FSCM	(4) PRIME VENDOR P/N	(8) ITEM NAME	(10) QTY EI	(11) UI UNIT ISSU	(18) EC RATE IMPO	(19) SL SHELF LIFE	(20) PLT PROD. TIME	(21) UP UNIT PRICE	(22) QUP QTY UNIT PACK	(23) TOTAL QTY. REC.	(24) REMARKS REF. DWG. #. NSN
14	NONE	GENOVA PRODUCTS #51405	1/2" PVC TEE	1	EA	1	10 YRS	8 WKS	$0.50	1	50	#A47300
15	NONE	GENOVA PRODUCTS #53401	1/4" X 3/8" OD POLYBUTY-LENE TUBING	.229	FT	1	10YRS	5 WKS	$0.50	.229 FT	25 FT	#B618637
16	NONE	GENOVA PRODUCTS #50005	CPVC TUBING .625 OD X .500 ID X 10 FT LONG	.094	FT	1	10 YRS	6 WKS	$ 5.00 10 FT LGTH	.094 FT	15 FT	#A618645
17	NONE	GENOVA PRODUCTS #50005	CPVC TUBING .625 OD X .500 ID X 10 FT LOMG	.229	FT	1	10 YRS	6 WKS	$ 5.00 10 FT LGTH	.229 FT	25 FT	#A618646
18												
19												
20												
21												
22												
23												
24												
25												
26												

MINIMUM ORDER OF $ 20.00 NET

Hamilton Industries, Inc.

Government Inspection Checklist

Sink Unit, Scrub, Field Hospital — 30-1/8" W x 24" D x 40" H, 265 Max. Wt. — 950S936

Inspector Name: _____ Date: _____

AC = Acceptable RE = Reject RC = Recheck NA = Non Applicable

1.0. PROCEDURE TO BE USED:

AC	RE	RC	NA		
				1.1.	**Each unit shall be examined for the following:**
( )	( )	( )	( )	101.	A specified item not present.
( )	( )	( )	( )	102.	Not free of sharp edges/points hazardous to user's hand.
( )	( )	( )	( )	103.	Unit not assembled and ready for installation.
( )	( )	( )	( )	104.	Unit not permanently marked (identification).
( )	( )	( )	( )	105.	Unit not prepared for shipment (loose parts).
( )	( )	( )	( )	106.	945, 931, 916, 932, 936: Any exterior panel, interior bottom, and/or pull board top does not appear flat, has ripples, bumps and/or curves that are distinctly noticeable during a cursory examination.
( )	( )	( )	( )	107.	945, 931, 916, 932, 936: Exterior bottom does not cover entire bottom.
( )	( )	( )	( )	108.	945, 931, 916, 932, 936: Skid-rail bottom edges that are intended to contact the floor are not rounded
( )	( )	( )	( )	109.	945, 931, 916, 932, 936: Missing support member above carrying handle for attachment of hanger unit 929.
( )	( )	( )	( )	110.	945, 931, 916, 932, 903, 930, 936: Carrying handles not recessed.
( )	( )	( )	( )	111.	945, 931, 916, 932, 903, 930, 936: Carrying handles lifting position not in approximate horizontal plane.
( )	( )	( )	( )	112.	945, 931, 916, 932: Pullboard, when closed, not easily grasped to open has no stop to prevent unintentional removal when fully extended, and/or bumper is not present (prevents metal to metal contact when opened and closed).
( )	( )	( )	( )	113.	945, 931, 916: Drawer has no stop to prevent unintentional removal when fully opened, and/or no bumper (prevents metal to metal contact when opened and closed).
( )	( )	( )	( )	114.	931: Partitionment set missing from any drawer.
( )	( )	( )	( )	115.	903, 930: An exterior panel, interior bottom, any shelf top, shelf support surface, and/or door panel (inside or outside) is uneven or has ripples, bumps and/or curves that distinctly noticeable during a cursory.
( )	( )	( )	( )	116.	903, 930: Strip padding material not fully attached to bottom of casework.
( )	( )	( )	( )	117.	903, 930: Doors not removable and mountable (no tools).
( )	( )	( )	( )	118.	903, 930: Doorway does not expose full cabinet interior.
( )	( )	( )	( )	119.	903, 930: Shelf not removable (one shelf may require tools) and/or required quantity of boxes do not fit.
( )	( )	( )	( )	120.	903: Shelves do not have alternate spacing available.

AC	RE	RC	NA		
( )	( )	( )	( )	121.	914: Box lid does not slide open and closed easily.
( )	( )	( )	( )	122.	928, 927: Top surface and/or a supporting surface does not appear flat, has ripples, bumps and/or curves that are distinctly noticeable during a cursory examination.
( )	( )	( )	( )	123.	936: Casters missing, or at least 2 do not have brakes.
( )	( )	( )	( )	124.	936: Waste piping, supply plumbing, faucet, soap dispenser, water heater, pump and captive air tank, quick disconnect coupling, water supply hose, line strainer, backflow valve, 18 inch tubing, power supply cord, power receptacle, strainer/stopper not present.
( )	( )	( )	( )	125.	936: Soap reservoir not easily accessible to replenish soap for the soap dispenser.
( )	( )	( )	( )	126.	936: Door latch does not engage the casework and/or either door may be opened without using the latch handle.
( )	( )	( )	( )	127.	936: Motor for pump not rated at least 1/3 HP for continuous duty.
( )	( )	( )	( )	128.	936: Missing bracket/receptacle for stowing a part/assembly/manuals which is not normally connected to the sink when the sink is installed and operational.
( )	( )	( )	( )	129.	936: Missing sound deadening material, underside of sink.
( )	( )	( )	( )	130.	937: Missing sound deadening material, underside of top.
( )	( )	( )	( )	131.	937: Table legs do not unfold as specified.
_____					Weight
_____					Dimension

1.2. Tests:

( )	( )	( )	( )	1.2.1.	Cold-rolled steel - Requirement 3.3.2.
( )	( )	( )	( )	1.2.2.	Cleanable, casework - Requirement 3.3.2.
( )	( )	( )	( )	1.2.3.	Finish of casework - Requirement 3.3.2.
( )	( )	( )	( )	1.2.4.	Casework, load top - Requirement 3.6.1.3.1.
( )	( )	( )	( )	1.2.5.	Casework, load top - Requirement 3.6.7.2.1.
( )	( )	( )	( )	1.2.6.	Top, attachment of - Requirement 3.6.1.3.2.
( )	( )	( )	( )	1.2.7.	Top, attachment of - Requirement 3.6.7.2.2.
( )	( )	( )	( )	1.2.8.	Pullboard, loading - Requirement 3.6.1.3.5.
( )	( )	( )	( )	1.2.9.	Carrying handle, hanger support & hanger unit loads - Requirements 3.6.1.3.6.; 3.6.2.3.4.; 3.6.7.2.4.
( )	( )	( )	( )	1.2.10.	Unit stability - Requirement 3.6.1.3.8.
( )	( )	( )	( )	1.2.11.	Unit stability - Requirement 3.6.2.3.12.
( )	( )	( )	( )	1.2.12.	Unit stability - Requirement 3.6.7.2.8.
( )	( )	( )	( )	1.2.13.	Casework, load top - Requirement 3.6.2.3.1.
( )	( )	( )	( )	1.2.14.	Plastic box, side tension - Requirement 3.6.3.1.
( )	( )	( )	( )	1.2.15.	Water flow rate, for temperature control - Requirement 3.6.7.2.11.
( )	( )	( )	( )	1.2.16.	Water heater output - Requirement 3.6.7.2.12.
( )	( )	( )	( )	1.2.17.	Table, load support - Requirement 3.6.8.1.1.
( )	( )	( )	( )	1.2.18.	Table, deflection - Requirement 3.6.8.1.2.

Hamilton Industries, Inc.

Your Responsibility When Receiving Freight

1. Steps to take at time of delivery to protect against loss or damage

A. **Verify Count** — Make sure you are receiving as many cartons as are listed on the delivery. If any shortage is discovered, not exactly how many cartons are short on the carrier's delivery receipt and have the driver note the shortage on your copy.

B. **Carefully Examine Each Carton for Damage** — If damage is visible, so note this fact on the delivery receipt and have the driver clearly note that fact on your copy. If carton has appearance that contents inside may possibly be damaged, insist that it be opened right at that time, and both you and the driver should make joint inspection of the contents. Any concealed damage discovered should likewise be noted on the delivery receipt and on your copy. Be sure to retain your copy.

C. **Immediately After Delivery, Open All Cartons and Inspect for Concealed Damage** — Even though driver has already left, all cartons should immediately be opened and the contents inspected for possible concealed damage.

2. Steps to Take When Visible or Concealed Damage is Discovered

A. **Retain Damaged Items** —Not only must the damaged items be held at the point where received, but the containers and all inner packing materials must be held until an inspection is made by a carrier inspector.

B. **Call Carrier to Report Damage and Request Inspection** — The call should be placed immediately upon discovery of the damage, but under no circumstances should it be put off longer than 15 days after delivery. Failure to report concealed damage within this 15 day period will almost certainly result in the carrier denying your claim.

C. **Confirm Call in Writing** — Although this is not a manditory requirement, for your own protection in establishing the fact the carrier was notified within the 15 day period, we strongly recommend that all calls be confirmed to the carrier in writing. Be sure to retain a copy of your letter.

3. Steps to Take When Carrier Makes Inspection of Damaged Items

A. **Have Damaged Items in Receiving Area** — Make certain the damaged items have not been moved from the receiving area prior to discovery of the damage. Allow inspector to inspect damaged items, cartons, inner packing materials and freight bill. Be sure to retain yur delivery receipt - it will be needed as a supporting document when claim is filed.

B. **After Inspector Fills Out Inspection report, Carefully Read It Before Signing** — If you do not agree with any facts or conclusions made by the inspector on the report, do not sign it. Unless repairs will be completely satisfactory, be sure the inspector requests replacement **on the inspection report.** A new item can be ordered **only** if the inspection report specifies "REPLACE".

4. Steps To Take After Inspection Has Been Made

A. **Continue to Retain Damaged Merchandise** — Even though inspection has been completed, damaged items cannot be used or disposed of without written permission from the carrier.

B. **Do Not Return Damaged Items to Shipper** — Return of such items should not be made without written authorization of the supplier.

C. **Secure Receipt From Carrier if Damaged Items are Picked Up for Salvage** — If yu surrender damaged merchandise to a carrier for salvage because it is valueless to you, be sure to secure a receipt from the driver when it is picked up and retain that receipt.

Remember, it is your responsibility to accept shipment regardless of damage, then to determine extent of damage and file a claim.

Keys To Receiving Your Order

1. Ask These Questions:
   A. Is it for me?
   B. Is the piece count correct?
   C. Is it damaged?

2. If Damaged:
   A. Did you note the exception on the driver's receipt?
   B. Did you discover the damage later? Then call the carrier to inspect.
   C. Did you save the packaging? Hold it until the inspection is made.
   D. Did you determine if you can:
      Repair it
      Return it to Hamilton Industries for repair, or
      Replace it
   E. Did you hold the damaged product for salvage by the carrier?

Now you can file a claim with the carrier or ask Hamilton Industries for assistance.

Appendix for Service Manual
DLA120-89-D-8558
Items 0002, 0003, 0004, 0005, 0006, 0007, 0008

PAGE NO.

ITEM 0002 - SHORT FORM PROVISIONING PARTS LIST (SFPPL) 36-41
DATA ITEM DESCRIPTION - DEPMEDS -AT -01

ITEM 0003 - TOOLS AND TEST EQUIPMENT LIST (TTEL) 27
DATA ITEM DESCRIPTION - DEPMEDS -AT -04

ITEM 0004 - COMMERCIAL MAINTENANCE MANUAL
DATA ITEM DESCRIPTION - DEPMEDS -AT -05

1. CONTENTS

a. Table of contents

b. General information

1. Full page composite illustration of the equipment (Illustration only) 31
2. Description of equipment, purpose and basic capabilities. 5
3. Listing of equipment supplied 30, 31
4. Listing of additional equipment required (including cabling but not supplies 12, 24
5. Summary of equipment specifications ..... (Eectrical Supply Requirements) 12, 13
6. Physcial descripment of each major..... assembly, including weight and dimensions 5

c. INSTALLATION

1. Unpacking 5
2. Proper location of units ..... N/A
3. Assembly interconnections (See installations) 12, 13
4. Initial adjustments 12, 13
5. Details of input power required. (Electrical Supply) 12, 13
6. Wire sizes 25
7. Cable fabrication details ..... N/A

d. OPERATION

1. Step-by-step instructions for starting, operating and stopping equipment. 12, 14
2. Meter readings, results to be expected from operation ..... N/A
3. Performance checks 12, 14

e. THEORY OR PRINCIPLES OF OPERATION
equipment block diagram 31, 32, 28

f. MAINTENANCE

1. Maintenance adjustments 26, 27, 29
2. Frequency adjustment verification checks 29
3. List of all test equipment required to support the system/equipment 27

g. STORAGE

1. Stored in supplied carton in clean, dry area 14, 15

h. PARTS LIST/ELECTRICAL/FUNCTIONAL/MECHANICAL COMPONENTS. 30, 31

I. DRAWINGS

1. Schematic diagrams of major assemblies 31, 32
2. Logic diagrams 1
3. Interconnection diagrams 16, 18
4. Wiring diagrams 19
5. Line drawings calling out all circuit components 19

ITEM 0005 - COMMERCIAL OPERATING INSTRUCTIONAL MANUAL DATA ITEM DESCRIPTION - DEPMEDS -AT -06

1. CONTENTS

a. Table of contents 3, 4

b. System familiarization

1. Illustration of equipment and main components of the system including nomenclature 6, 8
2. Overall description of the equipment, its purpose and its basic capability 5

c. Features and controls.

1. Full page delineating the main features of the basic item and their location 6, 8
2. An overall illlustration of the main operator controls, with a brief description as to its function and use. 6, 8
3. Where status alert indicators are provided. (Pilot light illuminates when water heater is operating. ..... N/A

d. Startup procedures

1. Step by step procedure to be followed each time the equipment is used 12, 14

e. Operation

1. Step by step instructions for starting, operating and stopping 12, 14

f. Patient safety and other precautions 11

g. Equipment care 11

h. Alerts troubleshooting 20-23, 26

i. Accessories ..... N/A

j. Misc. 42, 43
(Government Inspection Checklist)
(Sample only)

k. Storage 15

ITEM 0006 - SUPPLEMENTARY PROVISIONING TECHNICAL DOCUMENTATION DATA ITEM DESCRIPTION - DEPMEDS -AT -09

1. Technical identification for maintenance support considerations 28, 31, 33

2. Preparation of item identification for the purpose of asigning an NSN 22, 36-41
(Replacement List)

3. Review for item entry control 22, 36-41

4. Standardization 6, 7

5. Review for potential interchangeability and substitutability 22, 36-41

6. Item management coding 6, 7

7. Preparation of allowance issue list 22, 36-41

8. Initial procurement from the contractor or original manufacture 5

ITEM 0007 - DESIGN CHANGE NOTICE (DNC) DATA ITEM DESCRIPTION - DEPMEDS -AT -11 34

ITEM 0008 - CONSUMABLE/DURABLE ITEM LIST DATA ITEM DESCRIPTION - DEPMEDS -AT -14 35

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